

# **EXHIBIT G**

IN THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF DELAWARE

HONEYWELL INTERNATIONAL INC., )  
and HONEYWELL INTELLECTUAL )  
PROPERTIES, INC., )  
Plaintiffs, ) Civil Action  
-vs- ) No. 99-309-GMS  
HAMILTON SUNDSTRAND CORP., )  
Defendant. )

The videotaped deposition of  
JOHN T. GOOLKASIAN, called by the Plaintiffs for  
examination, taken pursuant to the Federal Rules of  
Civil Procedure of the United States District  
Courts pertaining to the taking of depositions,  
taken before CORINNE T. MARUT, C.S.R. No. 84-1968,  
a Notary Public within and for the County of  
DuPage, State of Illinois, and a Certified  
Shorthand Reporter of said state, at the offices of  
Bartlit Beck Herman Palenchar & Scott, Suite 300,  
54 West Hubbard Street, Chicago, Illinois, on the  
27th day of January, A.D. 2006, commencing at 9:11  
a.m.

JOB NO. 180999

09:17:42 1 out that way.  
 09:17:45 2 Q. Was leaving the Oblon firm in May of  
 09:17:48 3 2005 a purely voluntary decision on your part?  
 09:17:51 4 A. Most definitely. We have a very good  
 09:17:54 5 relationship. And if I want to go back to work,  
 09:17:56 6 they'd be pleased to have me.  
 09:18:06 7 Q. I see from your CV that is attached to  
 09:18:10 8 Exhibit A of your expert report, which has been  
 09:18:13 9 marked as Goolkasian Exhibit 1 to this deposition,  
 09:18:18 10 that you are a member of the American Intellectual  
 09:18:23 11 Property Law Association. Is that accurate?  
 09:18:25 12 A. Yes.  
 09:18:26 13 I don't have the CV on Goolkasian  
 09:18:28 14 Exhibit 1.  
 09:18:28 15 Q. Okay.  
 09:18:29 16 A. Unfortunately, I didn't --  
 09:18:32 17 Q. Then let's mark -- let's mark a complete  
 09:18:35 18 copy of your expert report, then, that does contain  
 09:18:43 19 your CV and also Exhibit B, which lists your prior  
 09:18:48 20 testimonial experience.  
 09:18:50 21 MS. STEVENSON: Can we just replace -- let's  
 09:18:54 22 withdraw that Exhibit 1 and re-mark a complete copy  
 09:18:59 23 of Exhibit 1.  
 09:18:59 24 (WHEREUPON, a certain document was

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09:18:59 1 re-marked Goolkasian Deposition  
 09:18:59 2 Exhibit No. 1, for identification,  
 09:19:17 3 as of 1-27-2006.)  
 09:19:17 4 MS. STEVENSON: David, this is the version he  
 09:19:19 5 had brought with him and we were just going to do  
 09:19:21 6 it for convenience but...  
 09:19:22 7 MR. HERRINGTON: Okay.  
 09:19:22 8 BY MS. STEVENSON:  
 09:19:25 9 Q. Is it correct, Mr. Goolkasian, that you  
 09:19:27 10 are a member of the American Intellectual Property  
 09:19:31 11 Law Association?  
 09:19:31 12 A. Yes, I am.  
 09:19:33 13 Q. And how long have you been a member of  
 09:19:36 14 that association?  
 09:19:38 15 A. I -- I think I may have been a member  
 09:19:41 16 since about 1969. I'm not sure.  
 09:19:46 17 Q. Have you ever served as president of  
 09:19:48 18 that association?  
 09:19:49 19 A. No, I have not.  
 09:19:51 20 Q. Have you ever served as an officer of  
 09:19:53 21 any capacity of that association?  
 09:19:57 22 A. No, I have not. I'm not politically  
 09:20:01 23 oriented.  
 09:20:03 24 Q. You mentioned that a large part of your

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09:20:11 1 current practice as a sole practitioner is to serve  
 09:20:14 2 as an expert witness in cases. Is that accurate?  
 09:20:17 3 A. Yes.  
 09:20:18 4 Q. And was that true for your time at -- as  
 09:20:23 5 a partner at Oblon as well?  
 09:20:26 6 A. When you say "a large part," I would say  
 09:20:29 7 about 50 percent of my time was as an expert  
 09:20:32 8 witness. The rest of the time, as I said  
 09:20:36 9 previously, was working on opinions and some amount  
 09:20:42 10 of prosecution, not very much prosecution.  
 09:20:46 11 The amount of work I did was, as I said,  
 09:20:51 12 extensive and as a result so I probably have  
 09:20:55 13 written more opinions than most people do in their  
 09:20:59 14 lifetime and I did that in ten years.  
 09:21:01 15 But I also worked as a -- for about five  
 09:21:07 16 or six years previously as an attorney and a  
 09:21:11 17 partner in another law firm.  
 09:21:14 18 Q. Before you were a partner at Oblon?  
 09:21:17 19 A. Well, that's before -- during my period  
 09:21:20 20 in the Patent Office I left the office and went out  
 09:21:24 21 and worked in a law firm.  
 09:21:27 22 Q. Okay. Well, focusing on your time at  
 09:21:29 23 Oblon right now, what years were you a partner at  
 09:21:34 24 the Oblon firm?

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09:21:35 1 A. I think from about 1996 through 2005,  
 09:21:43 2 when I left.  
 09:21:44 3 Q. Okay. And during those years, some  
 09:21:50 4 portion of your practice was dedicated to serving  
 09:21:54 5 as an expert witness --  
 09:21:56 6 A. Yes.  
 09:21:56 7 Q. -- in patent cases, correct?  
 09:21:57 8 A. Yes.  
 09:21:58 9 Q. And were you always an expert -- were  
 09:22:01 10 all of the cases in which you served as an expert  
 09:22:03 11 witness patent cases?  
 09:22:05 12 A. Yes.  
 09:22:06 13 Q. And what issues did you testify about as  
 09:22:13 14 an expert witness?  
 09:22:17 15 A. Well, Patent Office prosecution, what  
 09:22:21 16 happened in the Patent and Trademark Office. In  
 09:22:24 17 some instances I would -- depending on the judge  
 09:22:29 18 involved, I might discuss whatever the judge wanted  
 09:22:31 19 me to discuss. Essentially that's it, the Patent  
 09:22:41 20 Office practice.  
 09:22:41 21 And sometimes I was asked to work in a  
 09:22:45 22 patent case that -- where patents were involved but  
 09:22:50 23 there might have been an antitrust issue or  
 09:22:51 24 something like that. One time the Federal

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09:22:55 1 **Government hired me for an antitrust case.**  
 09:22:59 2 Q. You said that you would testify  
 09:23:00 3 regarding patent prosecution. Could you be more  
 09:23:04 4 specific as to the areas that you would provide  
 09:23:08 5 expert testimony regarding patent prosecution?  
 09:23:12 6 **A. Well, sometimes issues might crop up as**  
 09:23:17 7 **to what happened in the Patent and Trademark Office**  
 09:23:20 8 **with regard to the prosecution, particularly with**  
 09:23:23 9 **regard to amendments that were made, whether or not**  
 09:23:27 10 **there was a prosecution history estoppel, the -- or**  
 09:23:38 11 **whether or not an affidavit was important to an**  
 09:23:41 12 **examiner, whether or not that affidavit told the**  
 09:23:46 13 **whole truth, something like that.**  
 09:23:48 14 Q. Have you provided expert testimony in  
 09:23:52 15 patent trials in the past regarding prosecution  
 09:23:55 16 history estoppel?  
 09:23:57 17 **A. The only case in which that particular**  
 09:24:01 18 **thing came up was in a recent case in St. Louis in**  
 09:24:07 19 **which that issue of prosecution history estoppel**  
 09:24:11 20 **did come up -- come up.**  
 09:24:13 21 **And I was permitted to say that the**  
 09:24:17 22 **reason -- it was on cross-examination -- that the**  
 09:24:19 23 **reason that the claims did not cover what the**  
 09:24:23 24 **product was because they were estopped as a result**

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09:24:27 1 **of the prosecution history estoppel.**  
 09:24:29 2 Q. And what was the name of that case?  
 09:24:30 3 **A. That was the Monsanto vs. Bayer case.**  
 09:24:37 4 Q. And what was the basis for your  
 09:24:40 5 opinion -- your expert opinion in the Monsanto  
 09:24:44 6 case?  
 09:24:44 7 **A. They had limited the claims during**  
 09:24:47 8 **prosecution.**  
 09:24:47 9 Q. And did you do an analysis of the  
 09:24:49 10 prosecution history in the Monsanto case?  
 09:24:52 11 **A. Yes, I did.**  
 09:24:55 12 Q. Have you provided expert testimony in  
 09:25:00 13 patent cases regarding the prosecution history and  
 09:25:05 14 the actions taken by the patent applicant and the  
 09:25:10 15 examiner?  
 09:25:14 16 **A. I'm sorry. I didn't understand that**  
 09:25:15 17 **question.**  
 09:25:15 18 Q. Have you provided expert testimony in  
 09:25:18 19 patent cases whereby you have explained to the fact  
 09:25:23 20 finder the prosecution history?  
 09:25:26 21 **A. Yes. I have done that.**  
 09:25:28 22 Q. And have you -- go ahead.  
 09:25:30 23 **A. Generally speaking -- you use the word**  
 09:25:31 24 **"explained." I can generally recite what happened,**

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09:25:37 1 **and that can be done. As to giving reasons for**  
 09:25:42 2 **what happened, now, that depends quite often on the**  
 09:25:46 3 **judge. For example, Delaware, you could not give a**  
 09:25:49 4 **reason.**  
 09:25:56 5 Q. In your experience in Delaware, what  
 09:26:00 6 testimony could you give regarding prosecution  
 09:26:05 7 history?  
 09:26:06 8 **MR. HERRINGTON: Objection. He didn't say he**  
 09:26:08 9 **could give any testimony regarding prosecution**  
 09:26:09 10 **history in Delaware.**  
 09:26:09 11 **BY MS. STEVENSON:**  
 09:26:11 12 Q. You can answer.  
 09:26:13 13 **A. Well, I have testified in Delaware on**  
 09:26:16 14 **three occasions and then was limited only to what**  
 09:26:21 15 **happened in the Patent and Trademark Office, namely**  
 09:26:24 16 **is you can recite that the examiner said this and**  
 09:26:26 17 **that the attorney said that.**  
 09:26:40 18 Q. And in those instances you would walk  
 09:26:44 19 the fact finder through what happened in the  
 09:26:50 20 prosecution of the patents-in-suit?  
 09:26:53 21 **MR. HERRINGTON: Objection. That**  
 09:26:53 22 **mischaracterizes his testimony.**  
 09:26:54 23 **BY THE WITNESS:**  
 09:26:59 24 **A. Yeah, essentially what you would do**

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09:27:02 1 **would be to -- I think it's a good phrase is walk**  
 09:27:06 2 **them through exactly what happened by quoting**  
 09:27:10 3 **sections of the prosecution history.**  
 09:27:14 4 **In Delaware, the judges do not want to**  
 09:27:17 5 **know about the law from a patent expert.**  
 09:27:20 6 Q. Okay. And walking the fact finder  
 09:27:23 7 through the prosecution history using quotes from  
 09:27:28 8 the actual office actions can be helpful because  
 09:27:34 9 the prosecution history can be extremely dense and  
 09:27:38 10 difficult to understand for a fact finder, correct?  
 09:27:42 11 **MR. HERRINGTON: Are you talking about --**  
 09:27:43 12 **objection. Are you talking about in general or in**  
 09:27:45 13 **a particular case?**  
 09:27:45 14 **BY THE WITNESS:**  
 09:27:48 15 **A. Well, actually the fact -- you need to**  
 09:27:53 16 **get this evidence in and the -- a patent law expert**  
 09:27:58 17 **is a good way to get the evidence in. You could do**  
 09:28:02 18 **it with a technical expert, but it's more difficult**  
 09:28:04 19 **because a technical expert doesn't necessarily**  
 09:28:06 20 **understand what happened in the Patent and**  
 09:28:10 21 **Trademark Office. But some judges won't even**  
 09:28:15 22 **permit that patent law expert to put that testimony**  
 09:28:18 23 **in.**  
 09:28:20 24 **BY MS. STEVENSON:**

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11:35:36 1 **A. It had to do with the prosecution**  
 11:35:39 2 **history of a patent relating to a material used in**  
 11:35:46 3 **the drilling of oil wells.**  
 11:35:49 4 Q. And you provided expert testimony  
 11:35:52 5 regarding what topic?  
 11:35:54 6 **A. The prosecution history and inequitable**  
 11:35:58 7 **conduct that was alleged.**  
 11:36:05 8 Q. And were you received as an expert in  
 11:36:07 9 that case?  
 11:36:11 10 **A. Yes, I was.**  
 11:36:19 11 Q. The next case you testified at trial was  
 11:36:22 12 the U-Fuel vs. Highland Tank and Manufacturing case  
 11:36:27 13 where you testified in the Eastern District of  
 11:36:31 14 Pennsylvania in July of 2002.  
 11:36:34 15 What was the subject of your testimony  
 11:36:36 16 in that case?  
 11:36:37 17 **A. That was fuel tanks and it had to do**  
 11:36:42 18 **with the prosecution history and inequitable**  
 11:36:46 19 **conduct, and in that case is the one case where a**  
 11:36:48 20 **judge asked me to tell him about the patent law and**  
 11:36:53 21 **that had to do with description. He was unfamiliar**  
 11:36:56 22 **with that and he asked me to -- how it applied to**  
 11:37:02 23 **patent prosecution.**  
 11:37:03 24 Q. And were you serving as an expert for

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11:37:08 1 one particular party or were you the Court's expert  
 11:37:11 2 in that case?  
 11:37:11 3 **A. For one particular party.**  
 11:37:12 4 Q. And did the other side have a patent --  
 11:37:15 5 patent law expert that supplied a competing view of  
 11:37:19 6 the patent law?  
 11:37:20 7 **A. I don't think they had a patent law**  
 11:37:22 8 **expert. Maybe they did. I don't remember. But**  
 11:37:25 9 **the other side was not very competent.**  
 11:37:30 10 Q. And did you also -- what other topics  
 11:37:34 11 did you provide expert testimony regarding in that  
 11:37:37 12 case other than the patent law?  
 11:37:39 13 **A. Inequitable conduct and the prosecution**  
 11:37:42 14 **history, but the judge wasn't too interested in the**  
 11:37:45 15 **intellectual -- inequitable conduct. He said he**  
 11:37:47 16 **wanted to know about description, and it had to do**  
 11:37:51 17 **with continuation-in-part type cases and broadening**  
 11:37:54 18 **of claims. He just wanted to know what that was.**  
 11:37:57 19 Q. And I take it you were accepted as an  
 11:38:00 20 expert in that case it sounds like?  
 11:38:02 21 **A. Yes.**  
 11:38:02 22 Q. And which party did you represent in  
 11:38:04 23 that matter?  
 11:38:06 24 **A. I honestly don't remember, but I think**

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11:38:10 1 **it might have been Highland Tank; but I'm not sure**  
 11:38:13 2 **about that.**  
 11:38:13 3 Q. And do you remember what the outcome  
 11:38:15 4 was?  
 11:38:16 5 **A. It was the Defendant in the case.**  
 11:38:17 6 **It was successful as far as I know.**  
 11:38:18 7 Q. And let me go back and ask you about  
 11:38:20 8 BJ Services-Halliburton case. Which party did you  
 11:38:28 9 represent there?  
 11:38:28 10 **A. BJ Services.**  
 11:38:29 11 Q. Is that the Plaintiff?  
 11:38:30 12 **A. Yes.**  
 11:38:30 13 Q. And do you remember the outcome of that  
 11:38:32 14 litigation?  
 11:38:33 15 **A. BJ Services was successful in that case.**  
 11:38:38 16 Q. The next case you testified at trial  
 11:38:41 17 listed on Exhibit B is the Napro Biotherapeutics  
 11:38:47 18 case.  
 11:38:47 19 What was the subject of your testimony  
 11:38:49 20 at trial in that case?  
 11:38:52 21 **A. That had to do with inequitable conduct**  
 11:38:55 22 **in that case and the prosecution history. We were**  
 11:39:00 23 **trying to -- that's essentially what it was. It**  
 11:39:05 24 **had -- it was a derivation case and trying to**

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11:39:09 1 **instruct the judge in derivation, but...**  
 11:39:14 2 Q. And you were accepted as an expert  
 11:39:16 3 witness in that case?  
 11:39:17 4 **A. Yes, I was.**  
 11:39:19 5 Q. And which party did you represent?  
 11:39:24 6 **A. Mylan Laboratories.**  
 11:39:27 7 Q. They were the Defendant?  
 11:39:28 8 **A. Yes.**  
 11:39:29 9 Q. Do you recall the outcome of the  
 11:39:30 10 litigation?  
 11:39:31 11 **A. They were unsuccessful in that case.**  
 11:39:39 12 Q. The next case you testified at trial is  
 11:39:41 13 the Sunny Fresh, Inc. case?  
 11:39:44 14 **A. Yes.**  
 11:39:45 15 Q. In the District of Minnesota in 2003?  
 11:39:48 16 **A. That's correct.**  
 11:39:49 17 Q. What was the topic of your expert  
 11:39:51 18 testimony in that case?  
 11:39:54 19 **A. Eggs. It had to do with eggs and the**  
 11:40:01 20 **pasteurizing of eggs and, again, it was prosecution**  
 11:40:06 21 **history and inequitable conduct.**  
 11:40:14 22 Q. And you were accepted as an expert  
 11:40:15 23 witness in that case?  
 11:40:16 24 **A. Yes, I was.**

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11:40:17 1 Q. And which party did you represent?  
 11:40:20 2 A. **Sunny Fresh Food.**  
 11:40:22 3 Q. And do you recall the outcome of that  
 11:40:24 4 case?  
 11:40:24 5 A. **Sunny Fresh was successful in that case.**  
 11:40:27 6 Q. If you turn the page, I think the next  
 11:40:36 7 case listed where you testified at trial was the  
 11:40:39 8 Agfa Corporation case in Massachusetts in 2003.  
 11:40:43 9 What was the topic of your expert testimony in that  
 11:40:46 10 case?  
 11:40:46 11 A. **That had to do with inequitable conduct**  
 11:40:51 12 **and the subject matter was printing -- printing**  
 11:40:58 13 **machines. It was a computer -- computer-driven**  
 11:41:06 14 **printer, type printer.**  
 11:41:08 15 Q. And were you accepted as an expert  
 11:41:10 16 witness in that case?  
 11:41:11 17 A. **Yes.**  
 11:41:12 18 Q. And do you recall which company you  
 11:41:15 19 represented, which party?  
 11:41:16 20 A. **It was for Agfa -- no -- Agfa, yeah, at**  
 11:41:20 21 **that time.**  
 11:41:20 22 Q. And do you recall which party won?  
 11:41:22 23 A. **Creo was the winner. That is just**  
 11:41:28 24 **inequitable conduct, and that's on appeal right**

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11:41:30 1 **now.**  
 11:41:32 2 Q. Okay. And then the last case I see  
 11:41:35 3 listed that -- where you provided trial testimony  
 11:41:38 4 is the Monsanto case just in November of 2005 in  
 11:41:46 5 Montana I guess?  
 11:41:48 6 A. **Yes.**  
 11:41:48 7 Q. And which party did you represent in  
 11:41:50 8 that case?  
 11:41:51 9 A. **Monsanto.**  
 11:41:52 10 Q. Okay. And what was the topic of your  
 11:41:53 11 testimony?  
 11:41:54 12 A. **That was just prosecution, what**  
 11:42:00 13 **happened -- and also it had to do with file wrapper**  
 11:42:05 14 **estoppel.**  
 11:42:08 15 Q. And were you accepted as an expert  
 11:42:10 16 witness in that litigation?  
 11:42:11 17 A. **Yes.**  
 11:42:15 18 Q. And what was the outcome of that  
 11:42:17 19 lawsuit?  
 11:42:17 20 A. **Monsanto won that part of the lawsuit**  
 11:42:21 21 **and they go to trial in the next week -- next month**  
 11:42:23 22 **I think on the inequitable conduct part.**  
 11:42:26 23 Q. And will you be testifying in that  
 11:42:28 24 portion of the hearing as well?

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11:42:29 1 A. **Yes.**  
 11:42:30 2 Q. On inequitable conduct?  
 11:42:32 3 A. **Yes.**  
 11:42:45 4 Q. The Bayer case listed on the first  
 11:42:52 5 page was filed in the District of Delaware?  
 11:42:55 6 A. **Yes.**  
 11:42:55 7 Q. And you appeared only at deposition, is  
 11:42:59 8 that right?  
 11:42:59 9 A. **That's correct.**  
 11:43:00 10 Q. What was the topic of your expert  
 11:43:04 11 opinions in that case?  
 11:43:05 12 A. **The prosecution history and inequitable**  
 11:43:08 13 **conduct.**  
 11:43:08 14 Q. And do you recall why you did not give  
 11:43:13 15 trial testimony in that case?  
 11:43:15 16 A. **Delaware does not like to have attorneys**  
 11:43:22 17 **discuss inequitable conduct and some judges won't**  
 11:43:29 18 **even let attorneys present what happened in a**  
 11:43:33 19 **patent prosecution, patent cases.**  
 11:43:35 20 Q. Do you recall whether you were excluded  
 11:43:38 21 at that trial?  
 11:43:38 22 A. **I think I was, yeah.**  
 11:43:40 23 Q. Do you recall who the judge was?  
 11:43:41 24 A. **No. I've testified only before three**

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11:43:46 1 **judges in Delaware, and that was very limited to**  
 11:43:49 2 **what happened in the Patent and Trademark Office.**  
 11:43:52 3 Q. Okay. The Impax case is the next  
 11:43:58 4 Delaware case listed. What was the topic of your  
 11:44:02 5 testimony in that case?  
 11:44:04 6 A. **That would have been inequitable**  
 11:44:07 7 **conduct, but I don't remember much about that.**  
 11:44:08 8 Q. Do you recall whether you were excluded  
 11:44:09 9 as an expert or whether the case just -- something  
 11:44:13 10 else?  
 11:44:13 11 A. **I think that -- I think -- I don't know**  
 11:44:16 12 **what happened in that case, but I have a feeling**  
 11:44:18 13 **that I was excluded.**  
 11:44:18 14 Q. Okay.  
 11:44:21 15 A. **Generally speaking they do not want**  
 11:44:23 16 **experts in that -- in that district.**  
 11:44:29 17 Q. Glaxo is the next Delaware case listed  
 11:44:33 18 in the top of page 2. Do you recall what happened  
 11:44:39 19 in that case, if your testimony was excluded or  
 11:44:47 20 there is another reason why you did not testify at  
 11:44:50 21 trial?  
 11:44:54 22 A. **I think that case might still be going.**  
 11:44:57 23 **I'm not sure about that, though.**  
 11:44:58 24 Q. Okay. How about the Syngenta case.

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# **EXHIBIT H**

IN THE UNITED STATES DISTRICT COURT  
FOR DISTRICT OF DELAWARE

HONEYWELL INTERNATIONAL INC.,  
and HONEYWELL INTELLECTUAL  
PROPERTIES INC.,

Plaintiffs,

V.

HAMILTON SUNDSTRAND CORP.,

Defendant.

C.A. No. 99-309-GMS

**HAMILTON SUNDSTRAND'S RESPONSE TO PLAINTIFFS'  
FIRST SET OF REQUESTS FOR ADMISSION**

Defendant, Hamilton Sundstrand Corp. (“HSC”) responds to plaintiffs, Honeywell International, Inc.’s and Honeywell Intellectual Properties Inc.’s (collectively, “Honeywell”) first set of requests for admission, as follows:

## HSC'S GENERAL OBJECTIONS

1. HSC objects to each request for admission to the extent it calls for information that is protected by privilege from discovery under the attorney-client communication privilege, the attorney work product doctrine, or any other applicable privilege. Nothing contained in these responses shall be deemed a waiver of any privilege.

2. HSC objects to all Honeywell's Definitions, Instructions and Requests to the extent they seek to impose duties beyond those required by the Federal Rules of Civil Procedure, the Local Rules, or the rules of this Court.



3. HSC objects to Honeywell's definition of the terms "Sundstrand APS 3200," "APS 3200" and "Accused Product" to the extent they cover any versions or variations of that APU beyond the product on which the original jury verdict in this case was based.

4. HSC objects to Honeywell's definition of the term "Asserted Equivalent" as vague and ambiguous.

5. HSC objects to each Request for Admission as premature to the extent it calls for the disclosure of expert testimony.

### RESPONSES

1. Prior to August 30, 1983, no surge control system in any APU or other industrial or aerospace application resolved the "inverted-V/double-solution" in the same way as the "inverted-V/double-solution" was later resolved in the APS 3200 APU.

**RESPONSE:** HSC incorporates its general objections. HSC objects to this request for admission as premature to the extent it calls for the disclosure of expert testimony. Subject to and without waiving its objections, HSC denies this request.

2. Prior to August 30, 1983, no surge control system in any APU or other industrial or aerospace application utilized inlet guide vanes in surge control systems in the same way as inlet guide vanes were used in the surge control system of the APS 3200 APU.

**RESPONSE:** HSC incorporates its general objections. HSC objects to this request for admission as premature to the extent it calls for the disclosure of expert testimony. HSC also objects to this request for admission because it fails to identify what is meant by "the same way as inlet guide vanes were used in the surge control system of the APS 3200 APU." Subject to and without waiving its objections, HSC denies this request.

3. Sundstrand began developing the surge control system used in its APS 3200 after August 30, 1983.

**RESPONSE:** Subject to and without waiving its general objections, HSC admits that Sundstrand began developing the surge control system on the APS 3200 after August 30, 1983, but notes that the surge control system for the APS 3200 incorporated elements developed prior to the Relevant Amendment Dates.

4. Sundstrand's particular use of inlet guide vane position in the surge control system of the APS 3200 APU is not described elsewhere in patents or Prior Art.

**RESPONSE:** HSC incorporates its general objections. Subject to and without waiving its objections, HSC denies the request.

5. During the prosecution of the Patents-In-Suit, the Examiner did not make any mention of any Prior Art references that disclose inlet guide vanes or the use of their position as part of a surge control system.

**RESPONSE:** Subject to and without waiving its objections, HSC admits that during the prosecution of the Patents-In-Suit, the Examiner did not reference any Prior Art that disclosed inlet guide vanes or the use of their position as part of a surge control system, but notes that considerable Prior Art that was *not* presented to the Examiner during the prosecution of the Patents-In-Suit does disclose the use of inlet guide vanes as part of a surge control system.

October 11, 2005

THE BAYARD FIRM



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# **EXHIBIT I**

**Report Concerning Whether Hamilton Sundstrand's APS 3200 Auxiliary Power Unit  
Infringes U.S. Patent Nos. 4,380,893 and 4,428,194**

**Francis G. Shinskey**  
Process Control Consultant  
North Sandwich, NH 03259

**Qualifications:**

My degree is a Bachelor of Science in Chemical Engineering, received from the University of Notre Dame in 1952. Upon graduation, I was commissioned a Naval officer, serving the next two years in the Korean theater as Ass't Gunnery Officer and Electronics Repair Officer on a radar-picket destroyer. In 1954, I joined duPont as a Process Engineer at the Savannah River Plant. In 1955, I joined Olin Chemical Corp. at Niagara Falls as a Process Engineer, becoming an Instrument Engineer in 1957. In 1960, I joined The Foxboro Company, Foxboro MA, as a Systems Engineer, later becoming Chief Application Engineer, Process Control Consultant, and Bristol Fellow. I retired from The Foxboro Company in 1993, becoming an independent Process Control Consultant, a position which I now hold.

I have written 11 books and 136 papers on process control, and hold 17 patents on process control methods and apparatus. I have received three awards on process control work from the Instrument Society of America, plus a fellowship, and one award each from the American Institute of Chemical Engineers, the Institute of Measurement and Control (U.K.), the Nordic Process Control Group, and the American Automatic Control Council.

In addition to designing instrumentation and control products, I have experience in applying and commissioning control systems in the following industries: chemical and plastics, petroleum production and refining, pulp and paper, mining and metals, pharmaceutical, power (fossil, nuclear, and geothermal), food and beverage, aircraft, water and wastewater.

using Eq. (1), and the result, termed the “flow-related parameter” is sent as the controlled-variable input to the surge controller, which controls it at set point by manipulating the surge bleed valve. From Fig. 1 it can be seen that the volumetric flow at which surge occurs is a function of IGV position; therefore the set point for the surge controller in the patents is set as a function of IGV position, as shown in Figs. 4 and 6 of the patents.

The control system for the APS 3200, as described in APS 3200 ECB Requirements Specification, Rev. N of August 23, 1996, has no flowmeter: no pitot tube, orifice, venturi, or other device specifically intended for producing a velocity head such as used in the above-referenced patents. The differential pressure is instead measured across the diffuser, a set of stationary vanes which accept the high-velocity stream leaving the impeller tip and convert some of the velocity into a pressure rise, as opposed to the pressure loss measured across a flowmeter. Typically, about half of the pressure rise in a centrifugal compressor is developed across the impeller and half across the diffuser (Perry, p. 10-47). Therefore, diffuser pressure-rise is an indication of the compression ratio achieved by the compressor, as well as the flow through it. In the author’s experience, diffuser  $\Delta p/p$  constitutes a unique measure of potential surge conditions within a centrifugal compressor, a measure not described elsewhere in patents or prior art.

In addition to the diffuser  $\Delta p$  representing a pressure rise as contrasted to a pressure loss measured across a flowmeter, the magnitude of the  $\Delta p$  is also striking. Its measured range is specified as 0-25 psi (APS 3000 System Requirements Specification, p.15). By comparison, the differential pressure measured across a pitot tube in the discharge duct of a compressor typically is of the order of 5 inches of water column, and across an orifice plate, 20

Static Pressure Parameter > 0.35 test performs that function. The only possible effect of the test that uses IGV position is to maintain the system in the high-flow mode at a time when it is already in the high-flow mode.

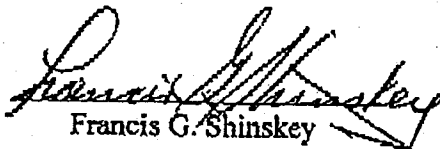
Moreover, Mr. Muller acknowledges that the only possible effect of the test that uses IGV position would be that "the flow-related parameter and proportional and integral signals are not used in controlling the surge bleed valve." This occurrence would cause element (c) of claim 4 not to be satisfied, because element (c) requires "utilizing said integral and proportional control signals to operate said surge bleed valve." Therefore, Mr. Muller's argument that element (d) is satisfied by the APS 3200's high-flow logic is directly contradicted by what element (c) requires.

In general, in response to paragraphs 44 and 45 of Mr. Muller's report, see my discussion above of the fact that the APS 3200 does not infringe claim 4 of the '194 patent.

X Conclusion

Based on my review of the APS 3200's surge control system and the asserted claims of the '893 and '194 patents, I conclude that the APS 3200 does not infringe the claims at issue either literally or under the doctrine of equivalents. I have attached to this report as Annex 1 a chart in which the highlighted language identifies elements of the asserted claims that are not present literally or by equivalents in the APS 3200.

November 10, 2000

  
Francis G. Shinskey

# **EXHIBIT J**



Westlaw.

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**H****Motions, Pleadings and Filings**

Only the Westlaw citation is currently available.

United States District Court,  
 N.D. Illinois, Eastern Division.  
 LIQUID DYNAMICS CORPORATION, Plaintiff,  
 v.  
 VAUGHAN COMPANY, INC., Defendant.  
 No. 01 C 6934.

Oct. 1, 2004.

Mark Warren Hetzler, Timothy P. Maloney, Jon A. Birmingham, Fitch, Even, Tabin & Flannery, Chicago, IL, Steven C. Schroer, Fitch, Even, Tabin & Flannery, Boulder, CO, Edward E. Casto, Jr., Friedman Suder & Cooke, Fort Worth, TX, for Plaintiff.

Alan L. Unikel, Louis S. Chronowski, Jr., Seyfarth Shaw, Chicago, IL, Robert J. Carlson, Mark P. Walters, Christensen, O'Connor, Johnson & Kindness, Seattle, WA, for Defendant.

**MEMORANDUM OPINION & ORDER**

CONLON, J.

\*1 Liquid Dynamics Corporation ("Liquid Dynamics") sues Vaughan Company, Inc. ("Vaughan") for infringement of U.S. Patent No. 5,458,414 ("the '414 patent") pursuant to 35 U.S.C. § 271 et seq. Liquid Dynamics sells a commercial mixing system called "JetMix." JetMix uses the invention described in the '414 patent to prevent settling and separation of liquid and solid components stored in slurry tanks. Liquid Dynamics claims Vaughan's competitive product, "RotaMix," uses mixing systems covered by the '414 patent. Vaughan counterclaims for invalidity and inequitable conduct. The court granted Vaughan's summary judgment motion on non-infringement of the '414 patent. Liquid Dynamics Corp. v. Vaughan Company, Inc., No. 01 C 6934, 2002 U.S. Dist. LEXIS 14102 (N.D.Ill. Jul. 31, 2002). The Federal Circuit reversed and remanded the case for trial. Liquid Dynamics Corp. v. Vaughan Company, Inc., 355 F.3d 1361 (Fed.Cir.2004). Both parties move *in limine* to bar

evidence at trial.

**DISCUSSION****I. Standard of Review**

Evidence is excluded on a motion *in limine* only if the evidence is clearly inadmissible for any purpose. See Hawthorne Partners v. AT & T Technologies, 831 F.Supp. 1398, 1400 (N.D.Ill.1993). Motions *in limine* are disfavored; admissibility questions should be ruled upon as they arise at trial. *Id.* Accordingly, if evidence is not clearly inadmissible, evidentiary rulings must be deferred until trial to allow questions of foundation, relevancy and prejudice to be resolved in context. *Id.* at 1401. Denial of a motion *in limine* does not indicate evidence contemplated by the motion will be admitted at trial. Instead, denial of the motion means the court cannot or should not determine whether the evidence in question should be excluded before trial. United States v. Connelly, 874 F.2d 412, 416 (7th Cir.1989).

**II. Liquid Dynamics' Motions *in Limine*****A. Limit Expert Testimony to Disclosed Opinions****1. Liquid Dynamics' Arguments**

Liquid Dynamics moves *in limine* to exclude any expert testimony that is new and untimely disclosed. Specifically, Liquid Dynamics asserts that on May 1, 2002, the last day for disclosure of Rule 26(a)(2) rebuttal expert reports, Vaughan submitted a report signed by employees Glen Dorsch and Kent Keeran ("the Dorsch/Keeran report"). On June 10, 2002, the court struck Section III, a purported computational flow dynamics ("CFD") study on a system in Plymouth, Indiana and Section IV, a purported CFD study on another patent, as new and untimely expert opinion. Liquid Dynamics argues that all trial testimony pertaining to Sections III or IV of the Dorsch/Keeran report must be excluded. Liquid Dynamics further contends any new opinion testimony by Dorsch or Keeran regarding infringement or critiques of CFD simulations conducted by Liquid Dynamics' expert, Dr. Lueptow, beyond that disclosed in the original report should also be excluded. Finally, Liquid Dynamics asserts Vaughan should be limited to offering either Dorsch or Keeran to testify about the report in accordance with this court's standing order limiting each party to

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only one expert witness per subject.

## 2. Vaughan's Arguments

\*2 Vaughan responds that it does not intend to present expert testimony from both Dorsch and Keeran. However, Vaughan asserts both witnesses worked directly on the design, analysis and implementation of some or all of Vaughan's accused systems. Thus, both will likely be offered at trial for fact testimony. With respect to Sections III and IV of the report, Vaughan affirms it will not violate the court's order. However, Vaughan contends it originally submitted Sections III and IV in the event Liquid Dynamics' experts testify, despite the absence of any such opinions in their reports, that prior art did not generate a substantial helical flow. If Liquid Dynamics does not offer new testimony, Vaughan will not offer Sections III and IV barred by the court's order.

## 3. Findings

Fed.R.Civ.P. 26(a) requires disclosure of expert witnesses and their written reports. The rule provides, "these disclosures shall be made at the times and in the sequence directed by the court." Fed.R.Civ.P. 26(a)(2)(c). Failure to comply with Rule 26 precludes a party from using at trial expert testimony that was not timely or fully disclosed. Fed.R.Civ.P. 37(c)(1). The sanction of exclusion is mandatory and automatic unless the party can show its Rule 26(a) violation was either justified or harmless. Finley v. Marathon Oil Co., 75 F.3d 1225, 1230 (7th Cir.1996). The court previously struck Sections III and IV of the Dorsch/Keeran report as untimely disclosed expert opinion. The motion *in limine* to exclude any evidence or testimony relating to Sections III and IV of the Dorsch/Keeran report must be granted. Further, the motion *in limine* to exclude all new opinion testimony by Dorsch or Keeran regarding infringement or critiques of Lueptow's CFD simulations beyond that disclosed in the original Dorsch/Keeran report is granted. Finally, this court's "Standing Order Establishing Pretrial Procedure" limits each party to one expert witness per topic. Liquid Dynamics' motion to preclude Vaughan from presenting both Dorsch and Keeran as experts is moot in light of Vaughan's representation that it will not do so. The motion *in limine* to preclude both witnesses from testifying must be denied.

## B. Expert Testimony of Norcross and Bathija

### 1. Liquid Dynamics' Arguments

Liquid Dynamics seeks to exclude expert testimony by Prakash Bathija, who is on Vaughan's witness list. Liquid Dynamics asserts Bathija is the author of an article entitled "Jet Mixing." However, Bathija was not timely disclosed as an expert witness. The court is asked to limit his testimony to authentication of the article because any testimony beyond authentication would amount to expert opinion. Further, Liquid Dynamics seeks to exclude undisclosed expert opinion testimony from Ken Norcross, also on Vaughan's witness list. On July 18, 2002, the court struck Norcross' summary judgment declaration as untimely and inappropriate expert opinion not disclosed prior to April 1, 2002, the deadline for disclosure of expert reports. However, Liquid Dynamics is concerned Vaughan will elicit expert opinion from Norcross at trial under the guise of lay opinion.

### 2. Vaughan's Arguments

\*3 Norcross is a former vice-president and director of technology at U.S. Filter Jet-Tech. Vaughan asserts Norcross was identified well before the close of discovery as a witness having knowledge regarding prior art systems. Vaughan contends the court's July 18, 2002 order striking Norcross' declaration acknowledged Norcross' knowledge of certain prior art systems. Vaughan proposes to call Norcross as a lay witness having personal knowledge of prior art, but not as an expert witness. Vaughan assures the court Norcross' testimony is purely factual in nature and he will not be asked to opine on flow patterns. Finally, Vaughan indicates it will not call Bathija as a witness at trial.

### 3. Findings

Liquid Dynamics' motion regarding Bathija is moot in light of Vaughan's representation that Bathija will not be called to testify. As to Norcross, the July 18, 2002 order specifically ruled that Norcross' conclusory opinions in his summary judgment declaration regarding helical flow patterns of prior art mixing systems were "not lay witness opinion under Fed.R.Evid. 702. The '414 patent and purported prior art helical flow patterns have been the subject of expert testimony by both parties. The analysis of a system's flow patterns is based on technical and scientific data." Further, Norcross' summary judgment declaration lacked sufficient foundation to establish his opinions regarding the validity of the '414 patent and the mixing industry's prior use of the '414 patent's claims were based on personal

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knowledge. Accordingly, the court struck Norcross' inappropriate and untimely expert testimony. Contrary to Vaughan's assertions, the court did not rule that Norcross is knowledgeable regarding certain prior art systems. Rather, the court indicated four paragraphs of his declaration that explained U.S. Filter Jet-Tech documents were apparently based on personal knowledge.

With proper foundation, lay opinion testimony may be admissible to assist the jury or court understand the factual issues. *Stagman v. Ryan*, 176 F.3d 986, 995-96 (7th Cir.1999). However, Fed.R.Evid. 701 provides lay witnesses may not opine regarding scientific, technical or other specialized knowledge within the scope of Fed.R.Evid. 702. Lay opinion testimony is "not to provide specialized explanations or interpretations that an untrained layman could not make if perceiving the same acts or events." *U.S. v. Conn*, 297 F.3d 548, 554 (7th Cir.2002). The motion *in limine* regarding Norcross is granted in part. Norcross may not testify to the flow pattern information contained in his summary judgment declaration. With proper foundation evidencing personal knowledge, Norcross' testimony regarding prior art systems is not clearly inadmissible for all purposes. The extent to which Norcross may offer lay opinion testimony not based on scientific, technological or other specialized knowledge, however, is unclear. The court must reserve ruling on the admissibility of Norcross' lay opinion testimony until trial. The parties will not refer to Norcross' opinions in opening statements, through questioning witnesses, or otherwise in the jury's presence without prior court authorization.

### C. Expert Testimony of Breidenthal

#### 1. Liquid Dynamics' Arguments

\*4 Liquid Dynamics seeks to exclude the testimony of Dr. Robert Breidenthal, an expert witness who submitted two reports on Vaughan's behalf and was deposed during discovery. Liquid Dynamics contends Breidenthal's opinions regarding patent validity and infringement should be barred because they are based on an improper claim construction rejected by the Federal Circuit. Liquid Dynamics argues Breidenthal's opinions are expressly based on an interpretation requiring the claim term "substantially helical" to conform to Figure 6 of the '414 patent. In contrast, the Federal Circuit construed the term "substantially helical" to encompass "all flow patterns that are generally, though not necessarily perfectly, spiral and that fill much, though not

necessarily all, of the tank's volume." *Liquid Dynamics*, 355 F.3d at 1369. This construction expressly rejected any claim construction requiring the nearly perfect helix portrayed by Figure 6. The Federal Circuit held it is inappropriate to rely "on the written description of Figures 5 and 6 to import the limitation of a perfectly helical flow. There is no language in the claim requiring such a perfectly helical flow." *Id.* at 1368. Liquid Dynamics argues Breidenthal's two opinions and deposition testimony clearly illustrate his reliance on Figure 6 in his assessment of the Vaughan systems. According to Liquid Dynamics, Breidenthal's reliance on a false premise taints all of his disclosed opinions and renders them irrelevant and inadmissible.

#### 2. Vaughan's Arguments

Vaughan responds that Breidenthal may be called to testify to: (1) the teachings of the '414 patent to one of ordinary skill in the art; (2) whether the teachings of the patent provide information sufficient for one of ordinary skill in the art to practice the invention claimed, and specifically, to create in a storage tank the helical flow pattern required by the claims; and (3) whether the evidence proffered by Liquid Dynamics demonstrates all limitations of the '414 patent's claims. Vaughan argues Breidenthal's opinions are based on his review of the patent's teachings and the language of the patent claims. His opinions do not require strict adherence to the structure of Figure 6. Instead, Breidenthal's opinions recognize Figures 5 and 6 illustrate desirable flow patterns and describe a preferred embodiment. His opinion, whether the patent includes a description sufficient to teach one of ordinary skill in the art how to practice the invention, is independent of flow pattern. Breidenthal concludes the patent does not teach how to achieve any specified flow pattern let alone a substantially helical one. Because Breidenthal's opinions are not premised on an understanding that "substantial helical flow" requires precise adherence to Figure 6, his testimony is not rendered irrelevant or inadmissible by the Federal Circuit's claim construction.

#### 3. Findings

Vaughan asked Breidenthal to opine whether: (1) the teachings of the '414 patent enable one skilled in the art to practice the invention; (2) Vaughan's configuration infringed the '414 patent's claims; and (3) Liquid Dynamics' experts Lueptow and Gillette properly construed the '414 patent claims. Breidenthal clearly relied on Figure 6 to answer those

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questions. His March 29, 2002 letter to Vaughan's counsel indicates Figures 5 and 6 represent "desirable flow patterns," and "the pitch of the helical flow pattern of FIG. 6 is presumably influenced by the ratio of the net radial to the net azimuthal momentum. The patent offers no teaching here." Breidenthal concludes the patent does not teach a specified flow pattern, particularly a substantially helical one. He further asserts a central issue to the infringement question concerns the helical flow path described in Claims 1 and 8, and states:

\*5 Claim 1 refers to "a substantial helical flow path" and Claim 8 refers to "a substantially helical flow path." FIG. 6 illustrates a flow path where a fluid element completes 14 orbits about the minor axis over about half of a full torus. Thus FIG. 6 teaches that the helix should have a fine pitch, with many orbits about the minor axis during one rotation about the major axis. From FIG. 6, I estimate that the ratio of the characteristic transverse speed V to the characteristic azimuthal speed U is approximately 18. The transverse component completely dominates the azimuthal component of the flow. Therefore, the helix described by the Claims 1 and 8, is substantial.

Breidenthal then compares CFD simulations to Figure 6 of the '414 patent:

Computational fluid dynamics simulations of Vaughan configurations by ADA Technology yield predicted particle trajectories that do not resemble FIG. 6 ... This is evident in a comparison between FIG. 6 of the '414 patent and VA 2880-2891. The basic shapes of the flow paths are completely different. The Vaughan flows shown in these computations do not exhibit a substantial helix, in my view.

Breidenthal's April 20, 2002 letter to Vaughan's counsel comments:

I believe one of average skill in the art would consider a "substantially helical flow path" that "substantially" fills the volume to imply a predominantly helical flow throughout most of the volume, as indicated in FIG. 6 of the '414 patent. In my view, none of the figures in Professor Lueptow's report resemble FIG. 6 of the '414 patent.

At his deposition, Breidenthal testified "the term substantially helical implies something like figure six ..." and admitted he compared various Vaughan flows to Figure 6. Breidenthal Dep. at 88, 90, 95-96.

Breidenthal relied on Figure 6 to opine on enablement; he concluded the patent does not teach how to achieve the results portrayed by Figure 6. He relied on Figure 6 to determine infringement; he

concluded Vaughan's systems did not resemble Figure 6. He relied on Figure 6 to rebut Lueptow and Gillette's opinions; he concluded none of their figures resembled Figure 6. Vaughan argues that although Breidenthal relied on Figure 6, he did not require "strict conformance," rather he required "substantial" conformance because he used flexible phrases such as "desirable flow pattern," "resemble Figure 6," "something like ... Figure 6," and "basic shapes of the flow paths." Vaughan contends the use of these phrases indicates he understood the claim words must be read in light of their ordinary meaning, an approach consistent with the Federal Circuit's holding.

Irrelevant evidence is not admissible. Fed.R.Evid. 402. Relevant evidence is defined as "evidence having any tendency to make the existence of any fact that is of consequence to the determination of the action more probable or less probable than it would be without the evidence." Fed.R.Evid. 401. Although relevant, evidence may be excluded if its probative value is substantially outweighed by the danger of unfair prejudice, waste of time, and jury confusion. Fed.R.Evid. 403. Breidenthal's opinions rely extensively on Figure 6. In light of the Federal Circuit opinion, any probative value of Breidenthal's opinion is outweighed by the danger of unfair prejudice and jury confusion. Accordingly, the motion *in limine* to exclude Breidenthal's expert testimony must be granted.

#### D. Testimony of Attorney Sandler

##### 1. Liquid Dynamics' Arguments

\*6 Liquid Dynamics seeks to exclude testimony from Ronald Sandler, Vaughan's patent attorney, who is offered to opine on the issue of materiality in support of Vaughan's inequitable conduct defense. Vaughan offers Sandler's testimony that the sale of a sludge storage tank to a city in Indiana was material prior art that should have been disclosed during prosecution of the '414 patent. Liquid Dynamics argues Sandler needs a technical background in the relevant art, specifically fluid dynamics and waste treatment systems, to testify on materiality. Liquid Dynamics bases its argument on Baxter Int'l v. McGaw, Inc., 149 F.3d 1321, 1328 (Fed.Cir.1998) (materiality is "judged based upon the overall degree of similarity between the omitted reference and the claimed invention in light of the other prior art before the examiner"). Liquid Dynamics asserts Sandler admittedly does not have a technical background in the relevant art. In addition, because two of his three



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opinion letters were disclosed on an untimely basis, his opinion should be barred under Fed.R.Civ.P. 26(a) and 37(c)(1). Finally, Liquid Dynamics argues at a minimum Sandler's testimony should be heard by the court outside the jury's presence because inequitable conduct is an issue for the court, not the jury, to decide. Paragon Podiatry Lab., Inc. v. KLM Labs., Inc., 984 F.2d 1182, 1190 (Fed.Cir.1993).

## 2. Vaughan's Arguments

Vaughan responds Sandler, a former examiner for United States Patent and Trademark Office and a patent attorney with 40 years of practical experience prosecuting patent applications, would provide expert opinion testimony relevant to the determination of whether a "reasonable patent examiner" considers certain prior art references material. Molins PLC v. Textron, 48 F.3d 1172, 1179 (Fed.Cir.1995) ("information is 'material' when there is a substantial likelihood that a reasonable examiner would have considered the information important in deciding whether to allow the application to issue as a patent"). Vaughan asserts Sandler is not offered for his expertise in the technical field; rather, he is offered for his expertise and knowledge as an attorney and former patent examiner under Fed.R.Evid. 702. Vaughan further asserts its original disclosure of Sandler's expert report was timely. Sandler however, on his own volition, sent two rebuttal letters to Vaughan's litigation counsel responding to Liquid Dynamics' expert rebuttal reports. Vaughan states its counsel did not request the additional letters and produced them, not for the purpose of injecting untimely testimony, but out of an obligation to supplement discovery. Further, the letters do not offer new opinions. Rather, they reinforce Sandler's original opinions and reflect statements Sandler would make on cross or re-direct examination regarding Liquid Dynamics' rebuttal opinions. Vaughan argues there is no prejudice to Liquid Dynamics if the statements are offered at trial in strict rebuttal to cross-examination. Finally, Vaughan contends patent lawyers regularly testify at trial and patent legal experts are routinely allowed to offer expert opinion testimony on whether undisclosed prior art references are material. *See e.g., Yarway Corp. v. Env. Control USA, Inc.*, 775 F.2d 268, 274 (Fed.Cir.1985); *Hebert v. Lisle Corp.*, 99 F.3d 1109, 1115 (Fed.Cir.1996).

## 3. Findings

\*7 Sandler's testimony is not clearly inadmissible for all purposes. A patent lawyer may testify in a patent

suit. Endress + Hauser, Inc., v. Hawk Measurement Sys. Pty. Ltd., 122 F.3d 1040, 1042 (Fed.Cir.1997). Sandler's lack of technical expertise goes to the weight of his testimony as opposed to its admissibility. Indeed, the court has discretion to adopt the legal opinion as its own, find guidance from it, or disregard it completely. Markman v. Westview Instruments, Inc., 52 F.3d 967, 983 (Fed.Cir.1995). As a former patent examiner, his testimony is relevant to the "reasonable patent examiner" standard as applied to the materiality of undisclosed prior art. Moreover, Vaughan has asserted justification for producing two of Sandler's three opinion letters after the deadline for expert reports passed, and acceptable reasons why Liquid Dynamics will not be prejudiced if the letters are not excluded. Liquid Dynamics has been in possession of the two letters for years and the contents are not a surprise. The motion *in limine* must be denied.

However, "a patent case is complex and confusing enough for a jury without infusing evidence which has no relevance to the issues to be decided by that jury." THK Am., Inc. v. NSK, Ltd., No. 90 C 6049, 1996 U.S. Dist. LEXIS 226, \*4 (N.D.Ill. Jan. 9, 1996). Because evidence of inequitable conduct is effectively evidence of fraud, there is a danger the evidence will unnecessarily "spill over" to Liquid Dynamics' prejudice on issues that *are* before the jury. *Id.* at \*4-5. For this reason, Sandler's testimony will be heard by the court outside the jury's presence. Counsel shall not refer to Sandler's testimony in the jury's presence.

## E. Reliance on Prior Art References and Testimony

### 1. Liquid Dynamics' Arguments

Liquid Dynamics asserts Vaughan recently produced a list of 70 prior art references that Vaughan may rely on at trial to show invalidity of the '414 patent. Liquid Dynamics argues that to rely on the prior art references, Vaughan must present expert testimony explaining element-by-element how each reference anticipates the '414 patent. However, Vaughan has not properly disclosed a witness skilled in the art to provide an explanation for each reference or the substance of purported testimony. The five individuals disclosed by Vaughan are: (1) Prakash Bathija, an author on one article; (2) Eric Mandt, an inventor on eight patents; (3) Mark Crump, an officer of Liquid Dynamics and inventor of the '414 patent; and (4)-(5) Glen Dorsch and Ken Norcross, whose proposed opinion testimony was previously stricken by the court. Specifically, Liquid Dynamics contends

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Bathija and Mandt were not disclosed as experts and Vaughan never disclosed the substance of their opinion testimony. Their testimony was therefore not timely disclosed. Crump is not an expert and at best may have personal knowledge of a few, but not all, references. Finally, the Dorsch and Norcross testimony was excluded as untimely pursuant to the court's June 22, 2002 order.

## 2. Vaughan's Arguments

\*8 Vaughan argues the notice produced was required pursuant to 35 U.S.C. § 282, mandating disclosure of prior art documents and witnesses at least 30 days before trial. In any event, Vaughan contends all references of prior art in the notice were disclosed over two years ago during the original discovery period. Further, Vaughan contends Liquid Dynamics' position that "expert opinion" testimony is required for Vaughan's invalidity counterclaim is not supported by case law. Prior art documents may be explained by witnesses having personal knowledge of the prior art installations. Vaughan contends witnesses having personal knowledge of facts are sufficient because the technology of this case is relatively simple; all prior art references are easy to understand and consist mostly of drawings showing storage tanks and flow generators within the tanks. Therefore, expert opinion testimony is not required for the jury to appreciate whether a document shows the structural features as claimed in the '414 patent. The witnesses identified may be relied upon as prior inventors or as having personal knowledge of prior art.

## 3. Findings

Liquid Dynamics' motion places substantial reliance on *Koito Mfg. Co., Ltd., v. Turn-Key-Tech, LLC*, No. 03-1565, 2004 U.S.App. LEXIS 17896, \*20-25 (Fed.Cir. Aug. 23, 2004). In *Koito*, the Federal Circuit reversed the district court's denial of Turn-Key's motion for judgment as a matter of law with respect to anticipation and obviousness. In denying Turn-Key's motion, the district court relied solely on Koito's reference to another patent application, the JP '082. Koito offered evidence of the JP '082 reference, but did not provide any testimony or other evidence that would "demonstrate to the jury how that reference met the limitations of the claims in the ... patent, or how the reference enabled one of ordinary skill in the art to practice the claimed invention." *Id.* at \*21-22. Indeed, Koito never mentioned that reference at trial after submitting it into evidence. The Federal Circuit held the district court erred in

finding Koito had provided substantial evidence to support the jury's finding of obviousness based solely on its evidence regarding the JP '082 reference. "We have consistently explained what is necessary to show anticipation by a given reference. Typically, testimony concerning anticipation must be testimony from *one skilled in the art* and must identify each claim element, state the witnesses' interpretation of the claim element, and explain in detail how each claim element is disclosed in the prior art reference. The testimony is insufficient if it is merely conclusory." *Id.* at \*23 (emphasis added).

*Koito* rejected the notion that explanatory testimony relating to the JP '082 reference was unnecessary based on *Union Carbide Corp. v. American Can Co.*, 724 F.2d 1567 (Fed.Cir.1991). *Id.* at \*24, n. 4. In *Union Carbide*, the alleged infringer did not provide explanatory testimony regarding prior art references. However, the references and the patent, a simple method of dispensing plastic bags, were easily understandable and the patentee, instead of the infringer, provided explanatory analysis regarding prior art references. The patent in *Koito*, which taught a method of strengthening injection-molded plastics by cross-laminating layers of plastics, was "not an easily understandable patent," and therefore needed some explanatory testimony or other evidence to compare the prior art with the patent at issue.

\*9 The court disagrees with Vaughan's assertion that the '414 patent is relatively simple because it relates to an apparatus for mixing sludge or slurry in a large storage tank. The '414 patent involves significant scientific and technical information that may not be easily understandable to the jury. Moreover, Vaughan relies on *Union Carbide* to support its assertion that expert testimony is not necessary when a patent is simple. Even in *Union Carbide*, where the expert testimony was not necessary due to the simplicity of the patent, the patentee presented explanatory testimony. In any event, to prove anticipation or obviousness, Vaughan must provide testimony "from *one skilled in the art* and must identify each claim element, state the witnesses' interpretation of the claim element, and explain in detail how each claim element is disclosed in the prior art reference." *Koito* at \*23 (emphasis added). The concept "one skilled in the art" is a theoretical construct used to determine obviousness. It does not necessarily refer to a particular individual or an expert. *Endress*, 122 F.3d at 1042. An expert witness may not always be one skilled in the art, and one skilled in the art may not necessarily be an expert witness. *Id.*; see also, *Dayco Prods. v. Total Containment, Inc.*, 258 F.3d 1317,

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1324 (Fed.Cir.2001) ("our objective is to interpret the claims from the perspective of one of ordinary skill in the art, not from the viewpoint of counsel or expert witnesses"). Liquid Dynamics' argument that Vaughan must present "expert testimony" for explanation is incorrect. None of the identified witnesses may testify as experts. However, if Vaughan proffers appropriate foundation establishing Mandt, Dorsch, Norcross and Crump are skilled in the art, they may testify about their personal knowledge of prior art. The motion *in limine* must be denied.

### III. Vaughan's Motions *in Limine*

#### A. Willful Infringement

##### 1. Vaughan's Arguments

Vaughan seeks to bar any testimony relating to Liquid Dynamics' claim of willful infringement. According to Vaughan, Liquid Dynamics' complaint and exhibit list show Liquid Dynamics' intent to establish Vaughan willfully infringed at least one claim of the '414 patent. Vaughan argues the state of mind of its decisionmakers is irrelevant because, as a matter of law, there can be no finding of willful infringement. Vaughan argues this court's grant of summary judgment and the Federal Circuit's dissenting opinion establish Vaughan has a substantial defense to infringement. According to Vaughan, the existence of a substantial defense establishes it had a good faith belief it would not infringe the '414 patent and a finding of willful infringement or enhanced damages under 35 U.S.C. § 384 would be inappropriate. Therefore, testimony relating to willful infringement would be irrelevant and prejudicial because of likely jury confusion. Vaughan argues admission of willfulness testimony would force Vaughan to waive the attorney-client privilege because evidence probative of Vaughan's state of mind may require testimony from Vaughan's attorneys who advised the company as to its potential defenses. Vaughan argues the exclusion of willfulness evidence in a trial on liability may ameliorate any risk of prejudice to Vaughan.

##### 2. Liquid Dynamics' Arguments

\*10 Liquid Dynamics responds that this motion *in limine* is actually an inappropriate motion for summary judgment. Vaughan ignores cases holding that litigation history, such as this court's summary judgment decision and the appellate dissent, are not relevant to the state of mind of the infringer when the

infringement began. Vaughan ignores a recent *en banc* Federal Circuit case flatly rejecting the argument that the existence of a substantial defense to infringement is *per se* sufficient to defeat liability for willful infringement. *Knorr-Bremse Systeme Fuer Nutzfahrzeuge GmbH v. Dana Corp.*, No. 01-1357, 2004 U.S.App. LEXIS 19185, at \*26-27 (Fed.Cir. Sept. 13, 2004). Liquid Dynamics further argues Vaughan's attorney-client waiver argument is frivolous because Vaughan already disclosed its counsel's opinion during discovery. Liquid Dynamics contends the focus of willfulness is on the infringer's mental state, not the mental state of the attorney authoring the non-infringement opinion. Therefore, a member of the litigation team is wholly unnecessary and Vaughan may use other witnesses at trial.

##### 3. Findings

Vaughan's reliance on *State Contracting & Eng'g Corp. v. Condotte America, Inc.*, 346 F.3d 1057 (Fed.Cir.2003) is misplaced. In *State Contracting*, the district court ruled at the close of trial that infringement was not willful as a matter of law. The Federal Circuit affirmed the finding because defendants had a substantial defense to infringement. *Id.* However, in *State Contracting* there was no dispute defendants acted in good faith when they infringed the patent. The facts of this case are very different. Whether Vaughan willfully violated the '414 patent is strongly contested. Even in *State Contracting*, the determination of willfulness was reserved until the end of trial. Vaughan presents no authority for excluding the willfulness issue from the trial. This court's initial grant of summary judgment and the Federal Circuit's dissenting opinion do not preclude a finding of willfulness at trial. The concept of a substantial defense to infringement providing a *per se* preclusion to a willfulness determination has been flatly rejected. *Knorr-Bremse*, 2004 U.S.App. LEXIS 19185, at \*26-27. Moreover, a willfulness determination typically requires review of the "totality of circumstances" an analysis of the factual record. *Id.* Vaughan's motion is an inappropriate attempt to limit the scope of trial issues in a manner more appropriately raised in a motion for summary judgment. The motion *in limine* to exclude evidence of willfulness must be denied.

#### B. Infringement Under Doctrine of Equivalents

##### 1. Vaughan's Arguments

Vaughan seeks to exclude testimony relating to infringement under the doctrine of equivalents.

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Vaughan argues Liquid Dynamics is subject to prosecution history estoppel due to an amendment made during the prosecution of the '414 patent that narrowed the limitation of a "substantially helical flow path." On appeal, the Federal Circuit stated "the narrowing amendments introduced during prosecution to overcome the application's obviousness in light of the prior art, however, may prevent Liquid Dynamics from using the doctrine of equivalents to claim any flows that are not substantially helical." *Liquid Dynamics Corp. v. Vaughan Company, Inc.*, 355 F.3d 1361, 1369 (Fed.Cir.2004). Further, the Federal Circuit recognized:

\*11 Liquid Dynamics presumptively surrendered its rights to all flows that are not substantially helical, even if they perform the same function as a substantially helical flow. Liquid Dynamics may establish literal infringement of the '414 patent by showing a substantially helical flow, but it will have to overcome presumption of surrender to claim that any flow other than a substantially helical one infringes under the doctrine of equivalents.

*Id.*, 355 F.3d at 1370 (internal citations omitted). Vaughan argues Liquid Dynamics cannot overcome this presumption of surrender because it cannot show the equivalent in question, a flow pattern that is not substantially helical, was unforeseeable at the time of the amendment. Vaughan contends the flow patterns alleged by Liquid Dynamics to be equivalent are encompassed by prior art because they are random, substantial volume-filling flows. These flow patterns were deemed unallowable in the original claims in view of the prior art that embraced those equivalents. Further, Vaughan contends the amendment requiring substantially helical flow was not merely tangential to the asserted scope of equivalents. The amendment requiring "substantial helical flow" was the essence of the invention and is the reason the claims were allowed. Finally, Vaughan argues Liquid Dynamics cannot provide a convincing reason the presumption of prosecution history estoppel should not apply, and Liquid Dynamics' decision to narrow the claims to only "substantially helical flow" is a classic example of surrender.

## 2. Liquid Dynamics' Arguments

In response, Liquid Dynamics argues the '414 patent's prosecution history explicitly demonstrates it did not intend to surrender any substantially volume-filling flows except those resulting in the "teacup effect." The teacup effect causes solid components to accumulate on the bottom of a tank when the contents

are simply rotated. Liquid Dynamics states the prosecution history illustrates claim language was added to clarify that it was *not* claiming an arrangement of flow-generating devices resulting in flow directions that caused the teacup effect. The prosecution history emphasized the counter-teacup flow direction of the invention was being claimed, not any specific flow path. Therefore, the only territory surrendered, if any, included flow paths resulting in the teacup effect. Because the surrender of equivalents issue was not before the Federal Circuit, it did not analyze the prosecution history to address whether the presumption of surrender had in fact been rebutted and its comments regarding surrender were *dicta*. Liquid Dynamics argues it is able to rebut the presumption of surrender.

First, Liquid Dynamics asserts all teacup countering flows were not foreseeable. Foreseeability depends on underlying factual issues; by arguing Liquid Dynamics should be precluded from presenting any evidence as to what one of ordinary skill in the art would have considered foreseeable, Vaughan improperly seeks summary judgment on the issue. Further, the prosecution history shows the reason for the amendment was tangential to the asserted equivalent because the amendment was clarifying not narrowing. The inventors amended the claims to better define the flow direction to counter the teacup effect; teacup-countering flow was not shown by the prior art. Finally, because of the shortcomings of language, the inventors could not describe all potential equivalent teacup-countering flows in the claims.

## 3. Findings

\*12 A patent holder is protected from efforts of copyists to evade liability for infringement by making only insubstantial changes to a patented invention. *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 535 U.S. 722, 726, 122 S.Ct. 1831, 152 L.Ed.2d 944 (2002). "The scope of a patent is not limited to its literal terms but instead embraces all equivalents to the claims described." *Id.* at 732. When the extension of protection beyond the literal terms of the patent results in an unclear range of equivalents, however, competitors may not be able to determine what is permissible and what infringes. *Id.* at 726. Therefore, competitors may rely upon prosecution history. When the patentee narrows its claims to fix a rejection by the patent and trademark office, it is estopped from claiming the original, broader claim was an equivalent. *Id.* Competitors may rely on the estoppel to ensure their inventions will not be found



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to infringe by equivalence. *Id.* "Where the original application once embraced the purported equivalent but the patentee narrowed his claims to obtain the patent or protect its validity, the patentee cannot assert that he lacked the words to describe the subject matter in question." *Id.* at 734. "The doctrine of equivalents is premised on language's inability to capture the essence of innovation, but a prior application describing the precise element at issue undercuts that premise." *Festo*, 525 U.S. at 734-35. In other words, prosecution history estoppel prevents the doctrine of equivalents from recapturing subject matter surrendered during prosecution. *Catalina Mktg. Int'l v. Coolsavings*, 289 F.3d 801, 813 (Fed.Cir.2002).

The Federal Circuit, addressing *Festo* on remand, recognized the Supreme Court established a presumption that a narrowing amendment made for a reason of patentability surrenders the entire territory between the original claim limitation and amended claim limitation. *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 344 F.3d 1359, 1365 (Fed.Cir.2003). A patentee may overcome the presumption by showing: (1) at the time of the amendment, the equivalent was unforeseeable; (2) the rationale underlying the amendment bore no more than a tangential relation to the equivalent in question; or (3) there was some other reason suggesting the patentee could not reasonably have described the equivalent in question. *Id.* Accordingly, "the first question in a prosecution history estoppel inquiry is whether an amendment ... has narrowed the literal scope of a claim. If an amendment was not narrowing, then prosecution history estoppel does not apply." *Id.* at 1366. If the alleged infringer shows the amendment was narrowing, the question becomes whether the reason for the amendment was a substantial one relating to patentability. If not, prosecution history estoppel does not apply. If so, it is presumed that the patentee surrendered all territory between the original claim limitation and the amended claim limitation. The patentee may rebut the presumption of total surrender by demonstrating it did not surrender the particular equivalent in question by using one of the three methods outlined by the Supreme Court. *Id.* at 1366-67. If successful, prosecution history estoppel does not apply. If unsuccessful, prosecution history estoppel bars the patentee from relying on the doctrine of equivalents for the accused element. *Id.* at 1367.

\*13 Rebuttal of the presumption of surrender is a question of law to be determined by the court, not the jury. *Id.* The first question in prosecution estoppel

inquiry is whether the amendments narrow the literal scope of the claim. Vaughan argues Liquid Dynamics has surrendered its rights to all flows that are not substantially helical. Liquid Dynamics argues the amendments clearly indicate the inventors' intent to claim the counter-teacup flow direction of the invention, not any specific flow path. This court previously reviewed the prosecution history on summary judgment and determined:

The original application presented to the Patent and Trademark Office ("PTO") did not describe claim 1's substantial helical flow path. The PTO rejected the original application based on prior art U.S. Patents Nos. 4,332,484 and 2,552,281. In response, the patentee argued the substantial volume filling flow described in Figures 5 and 6 was possible only with their invention, not the prior art patents. The patentee submitted an amendment that substantially narrowed the '414 patent's scope, and expressly outlined the flow pattern currently elaborated in claim 1.

*Liquid Dynamics*, 2002 U.S. Dist. LEXIS 14102, at \*15 (emphasis added). The amendments narrowed the scope of the claim. The Federal Circuit reviewed this court's analysis of the prosecution history, explained that the original claim 1 referred only to a "flow" whereas the amended claim 1 required a "substantial helical flow path," and held the presumption of surrender had been established. *Liquid Dynamics*, 355 F.3d at 1364-65, 1369-70. Liquid Dynamics may therefore rebut the presumption of surrender using any of the three methods articulated in *Festo*.

In assessing the first method of rebuttal, whether an alleged equivalent was unforeseeable at the time of the amendment, a district court may hear expert testimony and consider other extrinsic evidence relating to the relevant factual inquiries. *Festo*, 344 F.3d at 1369. "By its very nature, objective unforeseeability depends on underlying factual issues relating to, for example, the state of the art and the understanding of a hypothetical person of ordinary skill in the art at the time of the amendment." *Id.* In *Festo*, the Federal Circuit determined factual issues existed relating to the objective unforeseeability of the two accused equivalents and remanded the case to the district court for determination of whether the equivalents would have been unforeseeable to a person of ordinary skill in the art at the time of the amendments. If Liquid Dynamics fails to meet its burden of rebutting the presumption of surrender under the second or third prongs, it may present factual evidence at trial regarding whether the accused equivalent, flow patterns that are not

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substantially helical, was foreseeable to a person of ordinary skill in the art at the time of the amendments.

Liquid Dynamics does not successfully rebut the presumption of surrender under the second scenario, whether the rationale for the amendment bore no more than a tangential relation to the equivalent in question. Rebuttal under the second method should be discernible from the prosecution history record without the introduction of additional evidence except, when necessary, testimony from those skilled in the art as to the interpretation of that record. Festo, 344 F.3d at 1369-70. The original '414 patent application did not describe claim 1's substantial helical flow path; the flow pattern was described through subsequent amendments. A description of the substantially helical flow path, including its counter-teacup producing direction, cannot be considered tangential to the accused equivalent: flow patterns that are not substantially helical. On summary judgment, this court recognized the patent's helical flow path is central to the operation of the invention and the patent was narrowed to encompass a specific type of flow pattern central to the invention. *Liquid Dynamics Corp. v. Vaughan Co.*, No. 01 C 6934, 2002 U.S. Dist. LEXIS 14102, \*27-28 (N.D.Ill. July 31, 2002).

\*14 Liquid Dynamics has met its burden of rebuttal under the third method. Assessment of the third rebuttal method, whether there is some other reason suggesting the patentee could not reasonably be expected to have described the equivalent in question, should be limited to the prosecution history record when possible. Festo, 344 F.3d at 1370. This third category is a narrow one, but it may be satisfied when there was some reason, such as the shortcomings of language, the patentee was prevented from describing the alleged equivalent when it narrowed the claim. *Id.* Liquid Dynamics asserts shortcomings of language prevented the inventors from describing every precise equivalent flow pattern, therefore the prosecution history focused on teaching flows in a different direction to counter the teacup effect. Liquid Dynamics notes the prosecution history shows the amount of detail required to describe a flow path.

The court finds Liquid Dynamics has sufficiently articulated a reason the inventors could not have reasonably described the equivalent in question. Because it was impossible for the inventors to describe all teacup-countering helical flows that might result from changing certain variables, the

presumption of equivalents has been overcome. The motion *in limine* to exclude evidence of infringement under the doctrine of equivalents must be denied.

C-E. Unreliable Computer Simulations, Vector Plots and Expert Testimony Unhelpful to Trier of Fact

#### 1. Vaughan's Motions

Vaughan's final three motions seek exclusion of expert testimony and testing. Vaughan argues Liquid Dynamics' CFD simulations do not meet minimum standards and controls as determined by the software's vendor and the relevant scientific community. Further, Vaughan asserts the simulations were performed hastily by an unskilled worker who received virtually no supervision from Lueptow. Consequently, Vaughan contends the results are not scientifically reliable and are inconsistent with independent testing. According to Vaughan, Lueptow fails to account for the discrepancies, and did not exercise the standard of care required in his regular academic work when performing the testing. Vaughan contends Fed.R.Evid. 702 requires exclusion Lueptow's expert testimony because the opinion is based on unreliable data.

Vaughan also seeks to exclude vector plots attached to Lueptow's expert report. Vaughan contends the vector plots are two-dimensional "snap-shots" in the mixing cycle. According to Vaughan, these snap-shots are incapable of tracing the path of liquid or solid components because they lack the three-dimensional data necessary to predict the ultimate direction of flow. For instance, Vaughan asserts vector plots do not display out-of-plane components of velocity. According to Vaughan, out-of-plane components of velocity, however, often dominate the ultimate path of the particle. Vaughan argues several plots reflect zero or near-zero in-plane velocity. Accordingly, any velocity that might exist is out-of-plane and invisible on the two-dimensional plot. Vaughan contends the vector plots are misleading, and their probative value, if any, is outweighed by the potential prejudicial and confusing effect on the jury.

\*15 Finally, Vaughan seeks to exclude any expert opinion testimony that will not assist the trier of fact, including: (1) all opinion testimony of Edward Gillette concerning flow paths in the accused Vaughan systems; and (2) all opinion testimony of Gillette or Lueptow based upon CFD simulations. Vaughan asserts Gillette's opinions are speculative because they are not based on testing, observation or simulation of actual Vaughan installations. Vaughan

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contends Liquid Dynamics' CFD simulations were performed on computer models with tank geometries and flow parameters radically different from those of the accused Vaughan systems and are therefore unreliable. Vaughan argues the testimony is therefore inadmissible under Fed.R.Evid. 702 because it will not assist the jury in determining the flow patterns of the Vaughan systems.

## 2. Evidence in Support of Vaughan's Motions

Liquid Dynamics submits a combined opposition to Vaughan's three motions *in limine* seeking exclusion of expert testimony and testing. The court first addresses Liquid Dynamics' arguments regarding the admissibility of evidence submitted in support of Vaughan's three motions.

Liquid Dynamics asserts that on May 1, 2002, the last day for disclosure of Rule 26(a)(2) rebuttal expert reports, Vaughan submitted a report signed by two employees, Dorsch and Keeran (the "Dorsch/Keeran report"). As previously discussed, Sections III and IV of the report are stricken as untimely expert opinion. The unstricken portions of the report opined on the validity of Lueptow's CFD simulations (Section I) and hypothetical alternative systems (Section II). Lueptow's testing and related testimony relates to the issue of infringement. Section I of the Dorsch/Keeran report addressed Lueptow's simulations in approximately four (4) pages of rebuttal opinion. To support its motions *in limine* challenging Lueptow's expert work and testimony, Vaughan submits two affidavits from Dorsch dated August 24, 2004 and August 26, 2004 that total 42 pages. Liquid Dynamics asserts the August 26th declaration submits new, untimely opinion testimony that: (1) Lueptow's CFD analysis is based on mixing tanks that "vary significantly in tank geometry, nozzle sizing, and nozzle placement from the actual, real world geometries and structures of the accused Vaughan systems" (Dorsch Decl. at ¶¶ 4, 6-38); (2) critique Lueptow's CFD analysis (Dorsch Decl. at ¶¶ 39, 53-58, 60, 62-65, 68, 70-74, 76 and Attachment A); and (3) characterize the factual record (Dorsch Decl. at ¶¶ 77-87). Liquid Dynamics also argues the August 24th declaration submits new, untimely opinion testimony regarding vector plots. Dorsch Decl. at ¶¶ 2-6. Further, Liquid Dynamics contends Dorsch's new opinions rely on newly disclosed materials, specifically: (1) 32 pages of new CFD plots; (2) never disclosed portions of a CFX manual; and (3) publications from the American Institute of Aeronautics and Journal of Fluids Engineering that Vaughan never produced. Finally, Liquid Dynamics

asserts Dorsch improperly relies upon deposition testimony from an employee of the CFX software distributor, Mr. Paul, that occurred on the last day of discovery and over a month after the May 2002 report.

\*16 Vaughan asserts Liquid Dynamics' objections to the contents of Dorsch's declarations confuse fact with opinion. Vaughan argues Fed.R.Evid. 702 and Fed.R.Civ.P. 26 anticipate an expert may testify in forms other than expert opinion, including statements of fact not within the realm of Rule 26(a) expert opinion. Vaughan asserts Dorsch's declaration does not offer a new opinion, rather it summarizes facts and reiterates opinions and conclusions set forth in the original Dorsch/Keeran report. In support of its response, Vaughan submits a third declaration from Dorsch addressing Liquid Dynamics' objections and asserting his prior two declarations did not set forth a new opinion.

The court has reviewed the May 2002 report and Dorsch's declarations. Vaughan's attempt to submit new opinion testimony by calling it "fact" and trying to squeeze it under the parameters of generalized statements from the May 2002 report is appalling. The Dorsch affidavits are replete with inappropriate new opinions and the court will not attempt to recite it all here. As an example, however, Section I of the Dorsch/Keeran report states: "[f]or solving large tank mixing problems ... the tank and nozzle geometry must be constructed correctly ... if a problem to be solved with CFX is set up improperly, the user will get an answer that is incorrect and that may not represent what actually happens in the real world." Dorsch/Keeran Rep. at 3. The report then broadly and generally identifies four weaknesses of Liquid Dynamics' CFD studies: (1) outlet boundary condition; (2) RMS residuals (3) use of 2nd order advection scheme; and (4) mesh refinement or inflation boundaries. *Id.* at 3-6. In contrast, Dorsch's August 26th declaration states specifics, such as "the mixing tanks modeled by Jared Proctor for each of the eight categories vary significantly in tank geometry, nozzle sizing, and nozzle placement from the actual, real world geometries and structures of the accused Vaughan systems." Dorsch Decl. at ¶ 7. The precise dimensions, parameters and other physical characteristics that create, in Dorsch's view, a "huge disconnect" between Liquid Dynamics' computer models and the actual tanks is provided for the first time. In doing so, Dorsch comments:

-- The difference in nozzle diameter is "a very significant difference in light of what happens in the real world ... a reduction in nozzle diameter has

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a big effect on the fluid velocity;" Dorsch Decl. at ¶ 10.

-- "This is a problem for two reasons ... the velocity assumed in the model is not just wrong but wildly wrong." The model "departs radically from the real world ... a velocity and flow rate that could not physically be duplicated;" Dorsch Decl. at ¶ 12.

-- "There are a great many parameters in this summary of so-called Group A systems that are missing. These missing parameters are not simply important, but critical, to creating a reliable computer model on which to simulate flow pattern ..." Dorsch Decl. at ¶ 17.

\*17 Neither the elaborate description of the alleged physical inadequacies of the models, nor the conclusions Dorsch draws about their reliability were contained in the Dorsch/Keeran report. The same is true with respect to the August 24th declaration critiquing Lueptow's vector plots. Indeed, the Dorsch/Keeran report did not even mention, let alone describe, vector plots. Further, the report did not identify Dorsch's reliance upon the challenged 32 pages of new CFD plots, never disclosed portions of the CFX manual and new publications.

Vaughan argues the declarations merely recite or summarize facts or reiterate opinions and conclusions disclosed in the report. Further, Vaughan argues factual, non-opinion statements of a witness are not subject to disclosure and Dorsch may testify to facts within his personal knowledge. It is disingenuous for Vaughan to assert generalized statements in the Dorsch/Keeran report, such as "the tank and nozzle geometry must be constructed correctly ...," cover his elaboration more than two and a half years after the close of discovery.

Vaughan further argues the challenged CFD plots are not new information; rather, they display in graphic form: (1) results from simulations not discussed by Lueptow; (2) compilations of data produced by Liquid Dynamics evidencing Lueptow's lack of concern for his underling's work; and (3) summaries of streamline plots that could not have been generated at the time of the Dorsch/Keeran report. This is unacceptable. Expert reports must contain the data or other information considered by the witness in forming opinions, as well as any exhibits to be used as a summary of or support for the opinions. Fed.R.Civ.P. 26(a)(2)(B). Dorsch may not opine or offer "facts" to rebut the reliability of Lueptow's methods, models, data and conclusions beyond the original Dorsch/Keeran report. Failure to comply with Rule 26 precludes a party from using expert testimony that was not timely or fully

disclosed. Finley v. Marathon Oil Co., 75 F.3d 1225, 1230 (7th Cir.1996). Vaughan's attempt to circumvent the requirements of Fed.R.Civ.P. 26(a)(2) must fail. The following new opinion testimony is disregarded: August 26th Declaration ¶¶ 4, 6-39, 53-58, 60, 62-65, 68, 70-74, 76-87 and Attachment A; August 24th declaration ¶¶ 2-6; newly cited portions of the CFX manual, and newly cited publications.

### 3. Disposition of the Motions

Even if the court did not disregard the challenged portions of Dorsch's affidavits, the remaining motions *in limine* would be denied. First, Vaughan's challenges to Liquid Dynamics' application of the CFD technology must fail. Fed.R.Evid. 702 provides the standard for admitting expert scientific testimony in a federal trial. See Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579, 113 S.Ct. 2786, 125 L.Ed.2d 469 (1993). District courts are obligated to prevent unreliable expert testimony from admission. This obligation, however, does not include determination of whether the expert opinions are correct; rather the court's obligation is to examine the reliability of the expert's methodology. *Id.* at 593-96; Quiet Tech. DC-8, Inc. v. Hurel-Dubois UK Ltd., 326 F.3d 1333, 1340-44 (11th Cir.2003), citing Kumho Tire Co., Ltd. v. Carmichael, 526 U.S. 137, 153-54, 119 S.Ct. 1167, 143 L.Ed.2d 238 (1999). The Supreme Court set forth five factors to guide a court in assessing the reliability of scientific expert testimony: (1) "whether a theory or technique ... can be (and has been) tested;" (2) "whether the theory or technique has been subjected to peer review and publication;" (3) "the known or potential rate of error;" (4) "the existence and maintenance of standards controlling the technique's operation;" and (5) whether the technique or method has met with general acceptance. *Id.* at 593-94. The CFD methodology is not at issue. Courts have affirmed the reliability of CFD methodology. See Quiet Tech. DC-8, Inc. v. Hurel-Dubois UK Ltd., 326 F.3d 1333, 1343-44 (11th Cir.2003); Buckley v. Airshield Corp., 116 F.Supp.2d 658, 661 (D.Md.2000); Flomerics, Ltd. v. Fluid Dynamics, Int'l, Inc., 880 F.Supp. 60, 61-63 (D.Mass.1995). Vaughan does not dispute that CFD analysis is a reliable, scientific methodology. Indeed, Vaughan's own experts conducted CFD analysis. Instead, Liquid Dynamics' application of that methodology is challenged. The application of a reliable methodology goes to the evidence's probative value, however, not admissibility. Quiet at 1343-46. Challenges addressing flaws in the expert's application of a reliable methodology should be raised on cross-examination. Daubert, 509 U.S. at



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596 ("vigorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of challenging shaky but admissible evidence"); *see also Quiet*, 326 F.3d at 1344-45.

\*18 Second, Vaughan's challenges to Lueptow's vector plots must fail. Vaughan challenged the admissibility of Lueptow's vector plots on appeal. In its opinion, the Federal Circuit noted Vaughan's challenge to the vector plots' reliability, yet held Liquid Dynamics' evidence might convince a jury the patent was infringed. *Liquid Dynamics*, 355 F.3d at 1369. In any event, Vaughan has failed to demonstrate the vector plots are unreliable and inadmissible for all purposes.

Finally, Vaughan's challenges to Gillette's testimony must fail. A witness may qualify as an expert by knowledge, skill, experience, training, or education. *Fed.R.Evid.* 702. Gillette's *curriculum vitae* illustrates he has extensive experience in the field of sanitary engineering. Gillette considered testing conducted by Lueptow and voluminous documentation to formulate his opinions. An expert may consider testing of another expert in formulating opinions. *Walker v. Soo Line R.R.*, 208 F.3d 581, 589 (7th Cir.2000). Gillette's testimony is not inadmissible for all purposes. Vaughan's motions *in limine* to exclude computer simulations, vector plots and expert testimony must be denied.

#### CONCLUSION

Liquid Dynamics' motions *in limine* to limit testimony of defendant's experts to properly and timely disclosed opinions, to exclude undisclosed and untimely expert testimony of Norcross and Bathija, and to exclude Sandler's testimony are granted in part and denied in part. Liquid Dynamics' motion *in limine* to exclude Breidenthal's testimony is granted. Liquid Dynamics' motion *in limine* to exclude reliance on prior art references and related testimony is denied. Defendants' motions *in limine* are denied.

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#### Motions, Pleadings and Filings (Back to top)

- 2004 WL 2256988 (Trial Motion, Memorandum and Affidavit) Vaughan's Reply in Further Support of its Motion to Bifurcate, or in the Alternative, Motion for A Trial in Phases (Aug. 11, 2004)
- 2004 WL 2256986 (Trial Motion, Memorandum

and Affidavit) Vaughan's Reply in Support of its Motion for the Court's Ruling on Pending Summary Judgment Motions (Jul. 28, 2004)

- 2002 WL 32678312 (Trial Motion, Memorandum and Affidavit) Plaintiffs Response to Vaughan's Motion for Taxation of Costs (Sep. 03, 2002)

- 2002 WL 32678306 (Trial Motion, Memorandum and Affidavit) Reply of Defendant Vaughan to Plaintiffs Combined Opposimon to Defendant's Motions for Summary Judgment (Jul. 11, 2002)

- 2002 WL 32678302 (Trial Motion, Memorandum and Affidavit) Plaintiffs Response to Defendant's Motion for Interpretation of Patent Claim Terms (Jul. 03, 2002)

- 2002 WL 32387954 (Trial Motion, Memorandum and Affidavit) Notice of Filing (May. 22, 2002)

- 2002 WL 32924566 (Expert Report and Affidavit) Declaration of Glenn R. Dorsch (May. 22, 2002)

- 2002 WL 32924755 (Trial Motion, Memorandum and Affidavit) Vaughan's Opposition to Plaintiff's Motion to Exclude the Dorsch/Keeran Expert Report (May. 22, 2002)

- 2002 WL 32387965 (Trial Motion, Memorandum and Affidavit) Plaintiff's Disclosure of New Facts in Support of its Motion to Exclude Expert Testimony Proffered By Defendant Which is Untimely and Barred by Daubert and Kumho Tire (May. 20, 2002)

- 2002 WL 32388039 (Trial Pleading) Plaintiff's Reply to Defendant's Counterclaims (May. 20, 2002)

- 2002 WL 32678297 (Trial Motion, Memorandum and Affidavit) Plaintiff's Reply to Defendant's Counterclaims (May. 20, 2002)

- 2002 WL 32388042 (Trial Pleading) Notice of Motion (May. 16, 2002)

- 2002 WL 32387964 (Trial Motion, Memorandum and Affidavit) Notice of Motion (May. 10, 2002)

- 2002 WL 32388029 (Trial Pleading) Notice of Filing - First Amended Answer, Affirmative Defenses, Counterclaim and Jury Demand (May. 09, 2002)

- 2002 WL 32678290 (Trial Pleading) First Amended Answer, Affirmative Defenses, Counterclaim and

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Jury Demand (May. 09, 2002)

(Sep. 06, 2001)

• 2002 WL 32387961 (Trial Motion, Memorandum and Affidavit) Notice of Filing (Apr. 26, 2002)

• 2001 WL 34667337 (Trial Pleading) Complaint (Sep. 06, 2001)

• 2002 WL 32387962 (Trial Motion, Memorandum and Affidavit) Plaintiff's Opposition to Defendant's Motion for Leave to Amend Answer (Apr. 24, 2002)

• 1:01cv06934 (Docket) (Sep. 06, 2001)

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• 2002 WL 32387963 (Trial Motion, Memorandum and Affidavit) Notice of Motion - Combined Motion and Memorandum for Leave to Amend Answer (Apr. 12, 2002)

• 2002 WL 32387953 (Trial Motion, Memorandum and Affidavit) Memorandum in Support of Plaintiff's Motion to Dismiss Defendant's New Affirmative Defense of Inequitable Conduct for Waiver (Apr. 11, 2002)

• 2002 WL 32678286 (Trial Motion, Memorandum and Affidavit) Memorandum in Support of Plaintiff's Motion to Dismiss Defendant's New Affirmative Defense of Inequitable Conduct for Waiver (Apr. 11, 2002)

• 2002 WL 32387977 (Trial Motion, Memorandum and Affidavit) Plaintiff's Reply to Defendant's Response and Opposition to Plaintiff's Motion to Compel Under Fed.R.Civ.P.37 (Mar. 04, 2002)

• 2002 WL 32678282 (Trial Motion, Memorandum and Affidavit) Plaintiff's Reply to Defendant's Response and Opposition to Plaintiff's Motion to Compel Under Fed.R.Civ.P.37 (Mar. 04, 2002)

• 2002 WL 32387959 (Trial Motion, Memorandum and Affidavit) Notice of Filing (Mar. 01, 2002)

• 2002 WL 32678278 (Trial Motion, Memorandum and Affidavit) Defendant's Response and Opposition to Plaintiff's Motion to Compel (Mar. 01, 2002)

• 2002 WL 32387960 (Trial Motion, Memorandum and Affidavit) Notice of Motion (Feb. 21, 2002)

• 2001 WL 34396095 (Trial Pleading) Answer to Complaint, Affirmative Defenses and Jury Demand (Oct. 05, 2001)

• 2001 WL 34667343 (Trial Pleading) Answer to Complaint, Affirmative Defenses and Jury Demand (Oct. 05, 2001)

• 2001 WL 34396097 (Trial Pleading) Complaint

# **EXHIBIT K**

**Cases in Which John T. Goolkasian Testified**  
**By Deposition (D) or at Trial (T) Within Preceding Four Years**

*BJ Services Co. v. Halliburton Energy Services, Inc.,*

C.A.: H-00.0948 (S.D. Tex) – July 26, 2001 (D) – March 26, 2002 (T)

*Bayer AG, Bayer Corp. v. Housey Pharmaceuticals, Inc.,*

(D. DE) (C.A.: 01-148 SLR – June 21, 2002 (D)

*U-Fuel v. Highland Tank & Manufacturing, et al.,*

(E.D. PA) (C.A.: 02-CV-2723), July 24, 2002 (T)

*KLA-Tencor Corp. v. Tokyo Seimitsu Co. and TSK America, Inc.,*

(N.D. Calif.) C.A.: CV-01-2489 SBA – August 13, 2002 (D)

*Dictaphone Corporation v. Nice Systems Inc.,*

(D. Conn.) (C.A.: 3:00 CV 1143 (CFD) – November 7, 2002 (D)

*Sunny Fresh Foods, Inc. v. Michael Foods, Inc. and North Carolina State University,*

(D. Minn.) Civil Action No. 00-CV-2117 (DSD/JMM) – December 3, 2002 (D)

*Cordis Corp. v. Guidant Corp. & Advanced Cardiovascular,*

(Arbitration Panel Convened by Center for Public Resources Institute for Dispute Resolution) – December 10, 2002 (D)

*Impax Laboratories, Inc. v. Aventis Pharmaceuticals, Inc.,*

(D. DE) – May 2, 2003 (D)

*Napro Biotherapeutics Inc. and Abbott Laboratories v. Mylan Laboratories, Inc. Mylan*

*Pharmaceuticals Inc. and UDL Laboratories, Inc.,*

(W.D. Penn.) – May 27, 2003 (D); December 8-10 (T).

*Sunny Fresh Food, Inc. v. Michael Foods, Inc. and North Carolina State University,*

(D. Minn.) Civil Action No. 00-CV-2117 (DSD/JMM) – July 10 and July 21, 2003 (T)

*Kal Kan Foods, Inc. v. H.J. Heinz, et al.,*

(D. CA) No. CV-01-10961 JFW (JTLx) – July 16, 2003 (D); December 22, 2004 (D)

*IDEC Pharmaceuticals Corp. v. Corixa Corporation, et al.,*

(D. CA), No. 01-CV-1637 (RBB) – August 27, 2003 (D)



*Glaxo Group Ltd. and SmithKline Beecham Corp. v. TEVA Pharmaceuticals USA, Inc. and TEVA Pharmaceuticals Industries, Ltd.*,  
(D. DE), C.A. No. 02-219 (CMS) – September 10, 2003 (D)

*Agfa Corporation v. Creo Products Inc., et al.*,  
(D. Mass.), C.A. No. 00CV 10836 (GAO) – October 15, 2003 (D); December 11-12 and 14-15, 2003 (T)

*Syngenta Seeds, Inc., v. Monsanto Co.; Dekalb Genetics Corp.; Pioneer Hi-Bred International, Inc.; Dow Agrosciences, L.L.C.; and Mycogen Plant Science, Inc., and Agrigenetics, Inc.*,  
(D. DE), Civil Action No. 02-1331 (SLR), July 22-23, 2004 (D)

*Pfizer Inc. v. Mylan Laboratories Inc. and Mylan Pharmaceuticals Inc.*,  
(W.D. PA) Civil Action No. 02 1628, August 4, 2004 (D)

*Pall Corporation v. Cuno, Inc.*,  
(E.D.N.Y.) CV 03 0092 (JS/ETB), September 21, 2004 (D)

*Mycogen Corporation, Mycogen Plant Science, Inc. v. Monsanto Com., Monsanto Technology, LLC*,  
(S.D. IN), Case No. 1:04-CV-0573, January 12, 2005 (D)

*Inland Empire Foods, Inc. v. Zateca Foods, LLC*,  
(E.D. CA), CV No. EDCV 00-0203 RT AIJx), January 19, 2005 (D)

*Honeywell International, Inc. and Honeywell Intellectual Properties, Inc. v. Hamilton Sundstrand Corp.*, (D. DE), CV No. 03-1153-GMS, February 15, 2005 (D)

*Smithkline Beecham Corp v. Ranbaxy Laboratories and Ranbaxy Pharmaceuticals, Inc.*,  
(D. NJ), Case No. 03CV2158 (MLC), March 22, 2005 (D)

*Cephalon, Inc. v. Mylan Pharmaceuticals, Inc., Teva Pharmaceuticals USA, Inc., Barr Laboratories, Inc., and Ranbaxy Laboratories Limited*,  
(D. NJ) Case No. 032-CV-1394 (JCL), May 13, 2005 (D)

*UCB S.A. and UCB Pharma, Inc. v. Mylan Laboratories, Inc and Mylan Pharmaceuticals, Inc.*,  
(ND.GA), Civil Action No. 1:04-CV-0683, July 6, 2005 (D)

*In re Metoprolol Succinate Patent Litigation*,  
(ED Missouri), MDL Docket No. 1620, August 11-12, 2005 (D)

*Albemarle Corporation v. Great Lakes Chemical*,  
(MD Louisiana), Civil Action No. 02-505-A-M3 (JVP), September 29, 2005 (D)

*Monsanto v. Aventis,*

(E.D. MO) (C.A.: 4:00 CV 01915 ERW) – August 9, 2002 (D); November 9, 2005 (T)

*Haberman v. Playtex Products, Inc, Gerber Products Company and Wal-Mart Stores Inc.,*

(W.D. Wisconsin) (Civil No.05C-0224S) December 1, 2005 (D)

# **EXHIBIT L**

Westlaw.

Not Reported in F.Supp.2d  
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**H**

**Motions, Pleadings and Filings**

Only the Westlaw citation is currently available.

United States District Court,  
D. Delaware.  
EATON CORPORATION, Plaintiff,  
v.  
PARKER-HANNIFIN CORPORATION, Defendant.  
**No. Civ.A. 00-751-SLR.**

Jan. 24, 2003.

**MEMORANDUM ORDER**

ROBINSON, J.

\*1 At Wilmington this 24th day of January, 2003, having reviewed the parties' motions *in limine* and the papers filed in connection therewith;

IT IS ORDERED that:

1. Plaintiff's motion *in limine* to preclude defendant from introducing materials, evidence, or testimony related to alleged inequitable conduct during the prosecution of the '895 patent in connection with the '682 or '910 patents (D.I.102) is denied. Given the fact that inequitable conduct will be tried to the court, there is no concern that a jury will be confused or prejudiced by the issue of "infectious inequitable conduct." Inequitable conduct charges are disfavored by this court and charges of "infectious inequitable conduct" even more so. Therefore, the court will narrowly construe the issue in accordance with the Federal Circuit's jurisprudence. However, the court will not preclude defendant from spending its time on whatever relevant issues it chooses to pursue, particularly in the context of a bench trial.

2. Plaintiff's motion *in limine* to preclude defendant from using or referring to the deposition testimony of Russell L. Rogers with respect to claim interpretation or infringement (D.I.106) is granted in part and denied in part. The motion is granted to the extent that, if Mr. Rogers testifies at trial for plaintiff regarding the coupling industry in general, the level of a person of ordinary skill in the art, the prior art

available at the time, or actual couplings in use at the time, his deposition testimony related to validity is irrelevant and will not be admitted in connection with any witness. However, since a validity analysis must refer to the "invention" as defined by the claims, the motion is denied to the extent that, if Mr. Rogers testifies at trial for plaintiff regarding the validity of any of the patents in suit (e.g., comparing the prior art to the claimed inventions), he will have "opened the door" and all of his deposition testimony is relevant and will be admissible.

3. Defendant's motion *in limine* to preclude certain testimony of Dr. Edward M. Caulfield (D.I.100) is granted to the extent that Dr. Caulfield may not give testimony that is inconsistent with the court's claim construction. [FN1]

FN1. Mr. Rogers' testimony is discussed in the preceding paragraph.

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# **EXHIBIT M**

Westlaw.

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**H****Motions, Pleadings and Filings**

Only the Westlaw citation is currently available.

United States District Court, N.D. Illinois.  
 INTERMATIC INCORPORATED, Plaintiff,  
 v.  
 Dennis TOEPPEN, Defendant.  
**No. 96 C 1982.**

Feb. 28, 1998.

John K. Lucas, Barbara A. Larsen, Brinks, Hofer,  
 Gilson & Lione, Chicago, IL, for plaintiff.

Joseph D. Murphy, Patricia L. Gruber, Meyer,  
 Capel, Hirschfeld, Muncy, Jahn & Aldeen,  
 Champaign, IL, for defendant.

**REPORT AND RECOMMENDATION**

DENLOW, Magistrate J.

\*1 And the beat goes on! Having obtained an injunction by which Plaintiff Intermatic, Incorporated ("Plaintiff") won the right to use the name "intermatic.com" on the internet, Plaintiff now pursues this litigation in order to recover its attorneys fees. Under the Federal Trademark Dilution Act of 1995 (sometimes "Act" or "FTDA"), "the owner of a famous mark shall be entitled only to injunctive relief unless the person against whom the injunction is sought willfully intended to trade on the owner's reputation or to cause dilution of the famous mark." 15 U.S.C. 1125(c) (Supp.1998). If such willful intent is proven, the court has discretion to award attorneys fees. Plaintiff continues this litigation in the hope that it can persuade this Court to find willful intent and to exercise its discretion to award attorneys fees. This Report and Recommendation expands upon the Court's oral ruling made on February 18, 1998, at the close of oral argument on the motion.

Defendant Dennis Toeppen ("Defendant") has filed a Motion in Limine to exclude any evidence pertaining to his alleged willful violation of the FTDA, which became effective on January 16, 1996. [FN1] Defendant argues that the use of such evidence would result in an unfair retroactive application of the Act.

FN1. Defendant's initial motion was presented in the alternative as a Motion in Limine or for Reconsideration of the Court's Summary Judgment Order. Judge Williams denied the Motion for Reconsideration as untimely and requested that Defendant revise his motion to one solely in limine. While Defendant complied with this request, he maintained in his Motion in Limine that under Rule 54(b) of the Federal Rules of Civil Procedure the Motion for Reconsideration was timely and did not withdraw this motion. (Def.'s Mot. in Limine at 1 n. 1 (citing Fed.R.Civ.P. 54(b)). Even if the motion was timely, the Court does not recommend reconsidering its earlier decision because the injunctive relief granted was prospective and was based upon the conduct and the fact situation existing after the enactment of the FTDA, namely, Defendant's intent to arbitrage the domain name. See Intermatic, Inc. v. Toeppen ("Toeppen I"), 947 F.Supp. 1227, 1239 (N.D.Ill.1996).

The motion raises two questions. First, can Defendant be found liable for a willful violation of the FTDA based solely on actions which took place prior to the effective date of the FTDA? No. Second, can the court consider pre-FTDA conduct in deciding whether the post-FTDA conduct constitutes a willful violation of the Act? Yes. This Court recommends denying the Motion in Limine. This Court recommends admitting evidence of the Defendant's pre-FTDA conduct as background information that is useful in putting the post-FTDA conduct in context.

**I. BACKGROUND FACTS**

A detailed recitation of the facts may be found in this Court's prior decision. See Toeppen I, 947 F.Supp. at 1229-33. In December 1995 Defendant registered the domain name "intermatic.com" through Network Solutions, Incorporated ("NSI"). (Def.'s Mot. in Limine at 2.) Defendant placed a web page at that address promoting the development of a software program called "Internet Automatic Billing Software," hence the name "intermatic ." (Def.'s Mot. in Limine at 2.) Plaintiff subsequently attempted to register the domain name "intermatic.com," but was denied because of Defendant's earlier registration.

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See *Toeppen I*, 947 F.Supp. at 1232. On or about December 27, 1995, Defendant received a letter from Plaintiff demanding that he remove the web page and abandon the domain name "intermatic.com." (Def.'s Mot. in Limine at 2.) While Defendant did not abandon the domain name, he did replace the software information with a map of Champaign-Urbana. *OESee Toeppen I*, OE 947 F.Supp. at 1232-33. At no time did Defendant use the "intermatic.com" address to sell goods or services. See *id.* at 1233.

\*2 On January 16, 1996, the FTDA became effective. *OESee* OE 15 U.S.C. § 1125(c) (Supp.1998). The following April, Plaintiff made a request of NSI to place the "intermatic.com" domain name on hold; although Defendant did not object to this action by NSI, he did not relinquish the domain name. (Def.'s Mot. in Limine at 2.) On April 4, 1996, Plaintiff filed suit against Defendant and alleged violations of the Federal Trademark Infringement Act, Section 43(a) of the Lanham Act, and the Federal Trademark Dilution Act. See 15 U.S.C. § 1114(1) (1994); 15 U.S.C. § 1125(a) (1994); and 15 U.S.C. § 1125(c) (Supp.1998) respectively. Further counts against Defendant included violation of the Illinois Anti-Dilution Act (765 Ill.Comp.Stat. 1035/OE1 *et seq.* (West 1996)), the common law of unfair competition, the Uniform Deceptive Trade Practices Act, (815 Ill.Comp.Stat. 510/OE1 *et seq.* (West 1996)), and the Illinois Consumer Fraud and Deceptive Business Practices Act, (815 Ill.Comp.Stat. 505/OE2 (West 1996)).

In August 1996 Plaintiff and Defendant each filed cross-motions for summary judgment on all seven counts. After extensive briefing and oral arguments, this Court recommended granting injunctive relief for Plaintiff under the Federal Trademark Dilution Act and the Illinois Anti-Dilution Act. *Toeppen I*, 947 F.Supp. at 1234. The Court further recommended that Defendant's motion for summary judgment be denied and Plaintiff's motion for summary judgment relating to all other counts be denied because questions of fact under these counts persisted. See *id.* Judge Williams adopted the Court's Report and Recommendation for summary judgment. See *id.* at 1229.

Defendant's Motion in Limine was filed in preparation for the upcoming trial on the remaining counts and issues. Because Plaintiff has acknowledged that the injunctive relief it has received is sufficient under any theory, the only issue facing the Court is what damages, if any, are

appropriate. The only item of potential damages of any consequence appears to be attorneys fees.

## II. MOTION IN LIMINE

Defendant seeks to exclude any evidence going to his willful violation of the FTDA because his registration of "intermatic.com" was completed before January 16, 1996, the Act's effective date. Defendant argues that if willfulness was found and monetary damages were awarded, this Court would be applying the FTDA in an unfair and retroactive manner.

### A. The Purpose of Motions in Limine

Motions in limine are generally used to ensure evenhanded and expeditious management of trials by eliminating evidence that is clearly inadmissible for any purpose. See *Jonasson v. Lutheran Child and Family Serv.*, 115 F.3d 436, 440 (7th Cir.1997). Motions in limine should be granted only when evidence is clearly inadmissible on all potential grounds, and motions should be denied if this high standard is not met. See *Jonasson v. Lutheran Child and Family Serv.*, No. 93 C 7785, 1995 WL 579510 (N.D.Ill. Sept.28, 1995). The evidence at issue in this case is not clearly inadmissible on all potential grounds, and this Court recommends admitting Defendant's pre-enactment conduct for the sole purpose of providing background facts which help to put the post-enactment conduct in context.

\*3 The Seventh Circuit ruled that evidence of conduct which occurred prior to the enactment of a new statute may be admissible if it is relevant to the background of a case and is not used as the basis for finding liability. See *Jonasson*, 115 F.3d at 441. Excluding evidence of what transpired between Plaintiff and Defendant prior to the effective date of the FTDA would make contextualizing the post-enactment conduct unnecessarily cumbersome for the trial court. Further, motions in limine are generally granted to prevent the risk of jury confusion or prejudice, but these risks are not present in the instant case which will be a bench trial. Thus, this Court recommends admitting evidence of Defendant's pre-enactment conduct, not for use as the basis of liability, but solely to provide context and background information. See *Hennessy v. Penril Datacomm Networks, Inc.*, 69 F.3d 1344, 1349 (7th Cir.1995) (holding that conduct prior to the passage of the Civil Rights Act of 1991 is admissible to provide context and background).

### B. Admitting Evidence of Defendant's Pre-FTDA

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### Conduct is Not an Improper Retroactive Application of the Act

Defendant argues that his conduct was completed before January 16, 1996; thus, any evidence admitted to show that Defendant's putative violation of the FTDA was willful is irrelevant and would result in an unfair and retroactive application of the Act. In support of his retroactivity argument, Defendant points to the Supreme Court's decision in Landgraf v. USI Film Prod., 511 U.S. 244, 114 S.Ct. 1483, 128 L.Ed.2d 229 (1994), and three district court decisions which have refused to apply the FTDA retroactively. (Def.'s Mot. in Limine at 3-5, citing Circuit City Stores, Inc. v. OfficeMax, Inc., 949 F.Supp. 409 (E.D.Va.1996); Resorts of Pinehurst v. Pinehurst Nat'l. Dev. Corp., 973 F.Supp. 552 (M.D.N.C.1997); Viacom v. Ingram Enterp., 965 F.Supp. 1278 (W.D.Mo.1997).

In Landgraf, the Supreme Court stated that absent clear congressional intent to the contrary, a new provision should not be applied retroactively when such provision "impair[s] the rights a party possessed when he acted, increase[s] a party's liability for past conduct, or impose[s] new duties with respect to transactions already completed." 511 U.S. at 280, 114 S.Ct. at 1505. The Court recognized that disagreement will arise when any test of retroactivity is applied to hard cases, but the Court also explained that judges tend to have "sound instincts" in such matters when they consider issues of fair notice and reasonable reliance. *Id.* at 270, 114 S.Ct. at 1499. The Court also determined that a statute does "not operate retroactively merely because it is applied in a case arising from conduct antedating the statute's enactment." *Id.* at 269, 114 S.Ct. at 1499.

In interpreting the FTDA through the prism of Landgraf, the District Court for the Eastern District of Virginia ruled that an unfair, retroactive application of the Act would occur if it was applied to a defendant that had used its federally registered mark since 1993 and had invested \$12 million in promoting the mark. See Circuit City Stores, 949 F.Supp. at 411, 419. The court reasoned that application of the FTDA in that case would result in increasing a party's liability for past conduct completed prior to the Act's effective date. See *id.* at 416. At least two other district courts have followed the reasoning in Circuit City Stores and reached similar conclusions. See Resorts of Pinehurst, 973 F.Supp. at 560; Viacom, 965 F.Supp. at 1281.

\*4 Since Defendant filed his Motion in Limine, the

Northern District of Illinois has also considered whether the FTDA may be applied retroactively. See S Industries, Inc. v. Diamond Multimedia Sys., Inc., No. 96 C 3389, 1998 WL 21661 (N.D.Ill. Jan.20, 1998). The S Industries court ruled that a defendant who had spent a significant amount of money promoting its mark and had used its mark for five years before the enactment of the FTDA had "completed" its selection and publicizing of the mark before the act became effective. *Id.* at \*9. Because the defendant's conduct in S Industries was "completed" before the enactment of the FTDA, the defendant could not be held liable under the FTDA for its pre-enactment or post-enactment conduct. See *id.* at \*9.

This Court's recommendation that evidence of Defendant's pre-FTDA conduct should be admissible does not conflict with S Industries or the other district court decisions cited by Defendant. First, the instant case is distinguishable in that those decisions did not involve motions in limine, but directly addressed the merits of retroactivity. See S Industries, 1998 WL 21661 at \*1 (motion for summary judgment); Circuit City Stores, 949 F.Supp. at 410 (motion for summary judgment); Resorts of Pinehurst, 973 F.Supp. at 553 (motion for preliminary injunction); and Viacom, 965 F.Supp. at 1278- 79 (motion to dismiss).

Second, this Court agrees that no violation is found where conduct is completed before the effective date of the Act. However, this Court found in the instant case that a violation of the Act sufficient for injunctive relief was based on post-enactment conduct by Defendant. See Toeppen I, 947 F.Supp. at 1239. The S Industries court stated that the defendant's conduct was "complete" under Landgraf where it had invested large sums of money in promoting its mark and used the mark for five years prior to the FTDA's passage. 1998 WL 21661 at \*9. The conduct of Defendant was not completed under Landgraf because he intended to arbitrage the domain name after the effective date of the Act. Also, unlike the defendants in S Industries, Defendant continued to bar Plaintiff from using its mark on the Internet after the Act became effective.

Third, the court in Circuit City Stores stated that applying the FTDA to a defendant who had used its mark for an extended period of time and had invested large amounts of money in promoting the mark would be manifestly unfair. 949 F.Supp. at 419. In the present case, Defendant registered the mark "intermatic.com" only one month prior to the enactment date of the FTDA and spent a minimal



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amount of money in promoting its use of the mark. See Toeppen I, 947 F.Supp. at 1231 (providing that the registration of domain names presently costs \$100 per year). It will be up to the Court at trial to weigh all the evidence in considering the issue of willfulness.

Thus, this Court's recommendation that the evidence concerning Defendant's conduct prior to the effective date of the Act be admitted solely for the purpose of providing background and context does not constitute an impermissible retroactive application of the Act.

### III. PLAINTIFF'S MOTION FOR RULE 11 SANCTIONS IS DENIED

\*5 Plaintiff argues that Defendant's motion in limine was patently frivolous and brought in bad faith in violation of Rule 11 of the Federal Rules of Civil Procedure. The purpose of Rule 11 sanctions is to prevent attorneys from abusing the judicial system by imposing monetary sanctions when baseless filings are made in district courts. See Cooter & Gell v. Hartmarx Corp., 496 U.S. 384, 393, 110 S.Ct. 2447, 2454, 110 L.Ed.2d 359 (1990). Rule 11 is to be applied based on the plain meaning of the rule's language. See *id.*

In this case, Plaintiff did not initiate its Rule 11 motion separately from its opposition to Defendant's motion in limine, nor did it describe "specific conduct alleged to violate subdivision (b)." See Fed.R.Civ.P. 11(c)(1)(A). Yet, even if Plaintiff had properly moved the Court for Rule 11 sanctions, they would be denied.

Defendant's retroactivity argument arose in the context of a motion for reconsideration and motion in limine. The motion for reconsideration was denied. The motions submitted by Defendant were designed to have this Court reconsider its earlier summary judgment or to exclude evidence of willfulness, and these motions were based upon new case law. Although motions in limine in bench trials are rare, Defendant hoped to moot the trial if his argument was adopted. The fact that Defendant did not prevail does not entitle Plaintiff to seek sanctions. In conclusion, Defendant's motions were not frivolous nor were they intended to abuse the judicial process; accordingly, this Court recommends that Plaintiff's request for sanctions under Rule 11 be denied.

### IV. CONCLUSION

For the foregoing reasons, the Court recommends that Defendant's Motion in Limine be DENIED. The evidence prior to the effective date of the FTDA is

admissible to provide context and background information. This Court further recommends that Plaintiff's request for Rule 11 sanctions be DENIED.

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